



# Simple Poverty Scorecard<sup>®</sup> Tool

## Kenya

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### Abstract

The ScoroCS Simple Poverty Scorecard-brand poverty-assessment tool for Kenya is a low-cost, transparent way for pro-poor programs to prove and improve their social performance by getting to know the socio-economic status of their participants. Responses to the scorecard's 10 indicators can be collected in about 10 minutes and then used to estimate consumption-based poverty rates, to track changes in poverty rates, or to segment participants for differentiated treatment.

### Version note

This new scorecard for Kenya is based on data from 2015/16. It should be used from now on, replacing the old scorecard in Schreiner (2011) that is based on data from 2005/6. Given the usual assumptions that—if they hold—allow for estimating changes in poverty rates over time, cautious comparisons of estimates between the two scorecards are possible for the food poverty line and for the other national poverty lines (but not for other lines).

### Acknowledgements

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## Scorocs™ Simple Poverty Scorecard® Tool

Interview ID: _____	<u>Name</u>	<u>Identifier</u>
Interview date: _____	Participant: _____	_____
Country: <u>KEN</u>	Field agent: _____	_____
Scorecard: <u>003</u>	Service point: _____	_____
Sampling wgt.: _____	Number of household members: _____	

Indicator	Response	Score
1. How many household members are there?	A. Eight or more	0
	B. Seven	3
	C. Six	6
	D. Five	10
	E. Four	14
	F. Three	21
	G. Two	25
	H. One	34
2. How many household members have a mobile phone?	A. None	0
	B. One	6
	C. Two or more	10
3. Do any household members have a disability that gives them difficulties in engaging in an economic activity?	A. Yes	0
	B. No	4
4. In the last 7 days, did any household members work at least one hour on their own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on?	A. No	0
	B. Yes	2
5. In the last 7 days, were any household members casual workers in their main/primary job?	A. Yes	0
	B. No	5
6. Can the male head/spouse read and write in any language?	A. No	0
	B. No male head/spouse	2
	C. Yes	3
7. What is the highest educational level that the (eldest) female head/spouse reached, and what is the highest grade that she completed at that level?	A. None, madrassa/ <i>duksi</i> , pre-primary, primary grade 1, or other	0
	B. Primary grades 2 to 6	4
	C. Primary grades 7 or 8	7
	D. No female head/spouse	8
	E. Secondary years 1 to 3	10
	F. Secondary year 4, or higher	16
8. How many habitable rooms does this household occupy in its main dwelling (do not count bathrooms, toilets, storerooms, or garages)?	A. One, or none	0
	B. Two	5
	C. Three	8
	D. Four or more	12
9. What is the predominant wall material of the main dwelling unit?	A. Cane/palm/trunks, mud/cow dung, grass/reeds, no walls, or other	0
	B. Corrugated iron sheets, plywood, cardboard, or reused wood	1
	C. Bamboo with mud, stone with mud, uncovered adobe, covered adobe, stone with lime/cement, cement, bricks, cement blocks, or wood planks/shingles	5
10. Does the household have a functional television?	A. No	0
	B. Yes	9

## Back-page Worksheet: Household Members, Ages, Mobile Phones, Disabilities, and Work Status

Fill out the scorecard header first. Include the interview’s unique identifier (if known), the interview date, and the sampling weight of the participant (if known). Then record the full name and the unique identification number of the participant (who may differ from the respondent), of the participant’s field agent (who may differ from you the enumerator), and of the service point that the participant uses.

Then read to the respondent: *Please tell me the first names (or nicknames) and ages of all the members of your household, starting with the head. A household is a person or a group of people (regardless of blood or marital relationship) who live in the same compound (fenced or unfenced), who answer to the same head, and who share a common source of food and/or income as a single unit in the sense that they have common housekeeping arrangements (that is, they share or are supported by a common budget).*

Write down the first name/nickname and age of each member in completed years. You need to know the precise age only if it may be close to 6. Mark who is the male head/spouse (if he exists) and who is the (eldest) female head/spouse (if she exists). Record the number of household members in the scorecard header next to “Number of household members:”. Then circle the response to the first scorecard indicator about household size.

For each household member, ask whether the member has a mobile phone. Mark the corresponding response to the second indicator about mobile phones.

Likewise, ask for each member whether he/she is disabled, and mark the response to the third indicator about disability.

Then ask for each member who is 6-years-old or older about own-account work/business ownership outside of agriculture, marking the fourth indicator.

Finally, ask for each household member about casual labor, marking the fifth indicator. Then read the remaining five questions aloud, marking the responses.

Always keep in mind and apply the detailed instructions in the “Interview Guide”.

First name or nickname	Age	Head or head’s spouse?	Does [NAME] have a mobile phone?		Does [NAME] have a disability that gives him/her difficulties in engaging in an economic activity?		If [NAME] is 6 or older, then in the last 7 days did he/she work at least one hour on his/her own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on?			If [NAME] is 6 or older, then in the last 7 days, did he/she work in his/her main/primary job as a casual worker?		
			No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
1.		Head (male) Head (female)	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
2.		Spouse (male) Spouse (female) Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
3.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
4.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
5.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
6.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
7.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
8.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
9.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
10.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
11.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
12s.		Other	No	Yes	No	Yes	<6 or disabled	No	Yes	<6, disabled, or did not work	No	Yes
<b># members:</b>			<b>#:</b>		<b>Any ‘yes’?</b>			<b>Any ‘yes’?</b>			<b>Any ‘yes’?</b>	

**Look-up table to convert scores to poverty likelihoods:  
National poverty lines**

Score	Poverty likelihood (%)			
	National (1997 def.)			
	Food	100%	150%	200%
0–25	40.3	80.4	95.5	99.0
26–32	17.0	64.6	90.0	96.9
33–35	12.7	55.1	85.1	95.1
36–38	8.7	50.7	82.4	93.8
39–41	8.0	48.2	79.5	91.7
42–44	7.1	43.2	75.4	90.7
45–47	5.4	33.9	68.6	87.1
48–50	3.5	31.4	65.1	82.3
51–53	2.2	27.1	59.6	80.5
54–55	1.9	20.9	52.5	77.1
56–58	1.9	18.3	46.7	70.7
59–60	1.8	16.5	44.0	68.3
61–62	1.7	15.2	44.0	67.3
63–64	0.6	9.0	39.3	62.0
65–66	0.6	6.4	28.7	52.3
67–69	0.5	6.0	26.6	51.6
70–72	0.4	3.8	22.2	45.3
73–75	0.1	3.3	16.5	34.7
76–80	0.0	2.1	11.5	29.3
81–100	0.0	0.9	4.5	10.4

**Look-up table to convert scores to poverty likelihoods:  
International 2005 and 2011 PPP lines**

Score	Poverty likelihood (%)							
	Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
	\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
0–25	87.6	98.8	99.7	100.0	82.6	98.1	99.9	100.0
26–32	77.2	95.5	98.8	99.9	65.6	93.9	99.5	100.0
33–35	65.1	92.4	98.1	99.9	56.3	90.3	99.3	100.0
36–38	59.4	90.6	96.4	99.9	48.7	88.5	98.8	100.0
39–41	53.6	87.4	94.8	99.8	43.3	84.5	98.2	100.0
42–44	48.1	84.2	93.0	99.8	36.5	79.0	97.5	100.0
45–47	37.2	76.0	88.7	99.4	27.0	70.3	95.7	100.0
48–50	31.7	69.1	82.7	98.4	22.0	63.6	92.7	99.9
51–53	23.9	64.4	77.7	98.2	15.4	57.0	87.2	99.9
54–55	19.4	54.9	72.4	98.2	11.2	45.0	85.3	99.9
56–58	16.8	48.4	63.4	96.4	10.3	42.6	79.3	99.9
59–60	9.7	39.4	55.3	92.2	7.1	32.6	70.7	99.6
61–62	8.4	35.8	53.1	92.0	6.4	30.3	70.7	99.6
63–64	4.7	27.6	49.4	92.0	2.6	20.2	70.5	99.6
65–66	4.4	19.1	35.8	82.4	2.6	15.1	53.8	99.6
67–69	3.6	19.1	35.8	81.5	2.2	15.1	53.8	99.2
70–72	3.1	14.8	27.8	79.6	1.6	10.9	47.0	99.0
73–75	1.6	10.3	19.3	68.5	0.8	7.3	34.9	98.2
76–80	0.8	6.4	15.8	63.6	0.4	4.7	27.9	96.3
81–100	0.5	2.4	5.7	35.6	0.3	2.4	11.9	86.3

**Look-up table to convert scores to poverty likelihoods:  
Relative and percentile-based poverty lines**

Score	Poverty likelihood (%)						
	Poorest 1/2 < 100% Natl.	10th	20th	40th	50th	60th	80th
0–25	59.0	42.0	62.7	83.7	91.1	95.2	99.8
26–32	38.7	20.7	41.7	75.7	85.1	92.2	99.3
33–35	31.3	15.2	36.5	67.2	79.0	88.2	98.8
36–38	25.1	12.8	29.1	61.3	74.5	87.1	97.8
39–41	20.7	10.3	23.6	57.3	70.2	84.0	97.1
42–44	17.7	7.8	20.7	50.4	65.0	77.4	95.6
45–47	13.7	6.5	15.1	36.7	52.6	69.1	90.4
48–50	8.7	4.0	11.3	31.8	46.5	61.7	86.0
51–53	5.5	2.3	7.0	24.1	37.3	52.2	81.9
54–55	4.5	1.1	5.2	18.8	29.9	45.2	79.1
56–58	4.5	1.1	5.2	18.1	27.7	37.5	70.5
59–60	1.7	0.8	2.5	10.6	18.4	27.6	62.7
61–62	1.6	0.7	2.2	9.2	13.9	24.2	59.5
63–64	0.7	0.3	1.0	5.8	10.6	20.6	57.1
65–66	0.7	0.3	0.9	4.8	7.9	15.1	39.1
67–69	0.4	0.2	0.4	3.2	7.5	13.6	39.1
70–72	0.3	0.1	0.3	3.2	5.8	9.8	33.8
73–75	0.0	0.0	0.0	1.2	2.9	6.9	23.0
76–80	0.0	0.0	0.0	0.5	1.2	4.2	18.6
81–100	0.0	0.0	0.0	0.2	1.0	1.8	9.0

# Scorocs<sup>TM</sup> Simple Poverty Scorecard<sup>®</sup> Tool Kenya

## 1. Introduction

The Scorocs Simple Poverty Scorecard poverty-assessment tool for Kenya is a low-cost, transparent way for pro-poor programs to prove and improve their social performance by getting to know their participants better. The scorecard can be used to estimate the likelihood that a household has consumption below a given poverty line, to estimate a population's poverty rate at a point in time, to estimate the change in a population's poverty rate over time, and to segment participants for differentiated treatment.

The direct approach to poverty assessment via consumption surveys is difficult and costly. A case in point is the 2015/16 Kenya Integrated Household Budget Survey (KIHBS) by the Kenya National Bureau of Statistics (KNBS). Its household questionnaire runs about 130 pages and covers more than 1,100 questions, many of which have follow-up questions or are asked multiple times (for example, for each household member, crop, type of livestock, or shock). Enumerators completed interviews at a rate of about one household per 1.5 days. In addition, about half of all interviewed households kept a diary for a week of each item that they purchased or consumed.

In comparison, the scorecard's indirect approach is quick and low-cost. It uses 10 verifiable indicators drawn from the 2015/16 KIHBS (such as "How many household

members have a mobile phone?” and “What is the predominant wall material of the main dwelling unit?”). Responses to the indicators are used to get a score that is correlated with poverty status as measured by the exhaustive KIHBS survey.

The scorecard differs from “proxy-means tests” (Coady, Grosh, and Hoddinott, 2004) in that it is transparent, it is freely available,<sup>1</sup> and it is tailored to the capabilities and purposes not of national governments but rather of local pro-poor organizations in Kenya. The feasible poverty-assessment options for such organizations are typically blunt (such as rules based on land ownership or housing quality) or subjective and relative (such as participatory wealth ranking facilitated by skilled field workers). Poverty estimates from these approaches may be costly, their accuracy is unknown, and they are not comparable across places, organizations, nor time.

The scorecard can be used to estimate the share of a program’s participants who are below a given poverty line (for example, Kenya’s national line). USAID microenterprise partners in Kenya can use the scorecard with the \$1.90/day 2011 PPP line to report how many of their participants are “very poor”.<sup>2</sup> The scorecard can also be used to estimate changes in poverty rates. For all these applications, the scorecard is low-cost, consumption-based, and quantitative. While consumption surveys are costly even for governments, some pro-poor organizations may be able to implement the low-

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<sup>1</sup> The scorecard for Kenya is not in the public domain; it is copyright © 2018 Scorocs.

<sup>2</sup> USAID defines a household as *very poor* if its daily per-capita consumption is less than the highest of the \$1.90/day 2011 PPP line in 2015/16 (KES92, Table 1) or the line that marks the poorest half of people below 100% of the national line (KES68).



cost scorecard to help with monitoring poverty and (if desired) segmenting clients for differentiated treatment.

The technical approach aims to be understood by non-specialists. After all, if program managers are to adopt the scorecard on their own and apply it to inform their decisions, then they must first trust that it works. Transparency and straightforwardness build trust. Getting “buy-in” matters; proxy-means tests and regressions on the “determinants of poverty” have been around for decades, but they are rarely used to inform decisions by pro-poor organizations. This is not because these tools do not work, but because they are often presented (when they are presented at all) as tables of regression coefficients incomprehensible to non-specialists (with cryptic indicator names such as “LGHHSZ\_2” and with points with negative values and many decimal places). Thanks to the predictive-modeling phenomenon known as the “flat maximum”, straightforward, transparent approaches are usually about as accurate as complex, opaque ones (Schreiner, 2012a; Caire and Schreiner, 2012).

Beyond its low cost and transparency, the scorecard’s technical approach is innovative in how it associates scores with poverty likelihoods, in the extent of its accuracy tests, and in how it derives formulas for standard errors. Although the accuracy tests are straightforward and commonplace in statistical practice and in the for-profit field of credit-risk scorecards, the tests are rarely applied to poverty-assessment tools.

The scorecard is based on data from the 2015/16 KIHBS from Kenya's KNBS.

Indicators are selected to be:

- Inexpensive to collect, easy to answer quickly, and straightforward to verify
- Strongly correlated with socio-economic status
- Liable to change over time as socio-economic status changes
- Applicable in all regions of Kenya

All points in the scorecard are non-negative integers, and total scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). Non-specialists can collect data and tally scores on paper or on hand-held devices in the field in about ten minutes.

The scorecard can be used to estimate three basic quantities. First, it can estimate a particular household's *poverty likelihood*, that is, the probability that the household has per-capita or per-adult-equivalent consumption below a given poverty line.

Second, the scorecard can estimate the poverty rate of a population of households at a point in time. This estimate is the average of estimated poverty likelihoods among a representative sample of households from the population.

Third, the scorecard can estimate annual changes in poverty rates. With two independent samples of households from the same population, this is the difference in the average estimated poverty likelihood in the baseline sample versus the average estimated likelihood in the follow-up sample, divided by the difference (in years) between the average interview date in the baseline sample and the average interview date in the follow-up sample.

With one sample in which each household is scored twice, the estimate of the annual change in a poverty rate is the sum of the changes in each household's estimated poverty likelihood from baseline to follow-up, divided by the sum of years between each household's pair of interviews (Schreiner, 2014a).

The scorecard can also be used to segment participants for differentiated treatment. To help managers choose appropriate targeting cut-offs for their purposes, targeting accuracy is reported for a range of possible cut-offs.

This paper presents a single scorecard whose indicators and points are derived with Kenya's national poverty line and data from the 2015/16 KIHBS. Scores from this one scorecard are calibrated with this same data to poverty likelihoods for 19 poverty lines.

The scorecard is constructed using data from about three-fifths of the households in the 2015/16 KIHBS. Data from that same three-fifths of households is also used to calibrate scores to poverty likelihoods for the 19 poverty lines. Data from the other two-fifths of households is used to validate the scorecard's accuracy for estimating households' poverty likelihoods, for estimating populations' poverty rates at a point in time, and for segmenting participants.

Given their assumptions, all three scorecard-based estimators (the poverty likelihood of a household, the poverty rate of a population at a point in time, and the change in a population's poverty rate over time) are *unbiased*. That is, the true value matches the average of estimates in repeated samples from a single, unchanging

population in which the relationship between scorecard indicators and poverty is unchanging. Like all predictive models, the scorecard makes errors when applied (as in this paper) to a validation sample. Furthermore, it makes errors to some unknown extent when applied (in practice) to a different population or when applied after 2015/16 (because the relationships between indicators and poverty do change over time).<sup>3</sup>

Thus, while the indirect-scorecard approach is less costly than the direct-survey approach, the scorecard makes errors when applied in practice. (Observed values from the direct-survey approach are taken as correct, ignoring sampling variation.) There are errors because the scorecard necessarily assumes that future relationships between indicators and poverty in all populations will be the same as in the construction data. Of course, this assumption—inevitable in predictive modeling—holds only partly.

The average error in the scorecard’s estimated poverty rate at a point in time (that is, the average of differences between estimated and observed values across 1,000 bootstrap samples of  $n = 16,384$  from the validation sample) for 100% of the national poverty line is about +0.2 percentage points. The average across all 19 poverty lines of the absolute values of the average error is about 2.9 percentage points, and the maximum of the absolute values of the average error is 7.0 percentage points.<sup>4</sup> These

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<sup>3</sup> Examples include nationally representative samples at a later point in time and sub-populations that are not nationally representative (Diamond *et al.*, 2016; Tarozzi and Deaton, 2009).

<sup>4</sup> The average absolute values of the average errors for the four national lines is 0.3 percentage points, versus 3.8 for international PPP lines and 3.3 for relative lines.

estimation errors are due to sampling variation, not bias; the average error would be zero if the whole 2015/16 KIHBS were to be repeatedly re-fielded and re-divided into sub-samples before repeating the entire process of constructing and validating the resulting scorecards.

With  $n = 16,384$ , the 90-percent confidence intervals are  $\pm 0.8$  percentage points or smaller. For  $n = 1,024$ , the 90-percent intervals are  $\pm 3.0$  percentage points or smaller.

The scorecard's accuracy in practice for estimating changes in poverty rates over time cannot be known; there is no data from a post-2015/16 KIHBS that could be used as a follow-up to estimate change against a baseline estimated from the 2015/16 KIHBS validation sample.

Section 2 below documents data and poverty lines. Sections 3 and 4 describe scorecard construction and offer guidelines for implementation. Sections 5 and 6 tell how to estimate households' poverty likelihoods and a population's poverty rate at a point in time. Section 7 discusses estimating changes in a population's poverty rate. Section 8 covers targeting. The last section is a summary.

The "Interview Guide" (found after the References) tells how to ask questions—and how to interpret responses—so as to mimic practice in Kenya's 2015/16 KIHBS as closely as possible. The "Interview Guide" (and the "Back-page Worksheet") are integral parts of the scorecard for Kenya.

## 2. Data and poverty lines

This section presents the data used to construct and validate the scorecard. It also documents Kenya's definition of *poverty* as well as the 19 poverty lines to which scores are calibrated.

### 2.1 Data

Indicators and points for the scorecard are selected (*constructed*) based on data from a random three-fifths of the 21,773 households<sup>5</sup> in the 2015/16 KIHBS, Kenya's most-recent national household consumption survey. These same three-fifths of households are also used to associate (*calibrate*) scores to poverty likelihoods for all poverty lines.

Data from the other two-fifths of households from the 2015/16 KIHBS is used to test (*validate*) scorecard accuracy for point-in-time estimates of poverty rates *out-of-sample*, that is, with data that is not used in construction/calibration. Data from those same two-fifths of households are also used to test out-of-sample targeting accuracy.

Field work for the 2015/16 KIHBS took place from 1 September 2015 to 31 August 2016.

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<sup>5</sup> Scorecard construction and validation omits 34 households with no data on characteristics of the residence.

## 2.2 Poverty rates at the household, person, and participant level

A *poverty rate* is the share of units in households in which total household consumption (divided by the number of household members or the number of adult equivalents in the household) is below a given poverty line. The unit of analysis is either the household itself or a person in the household. By assumption, all members in a given household have the same poverty status (or estimated poverty likelihood).

### 2.2.1 Household-level estimates

To illustrate, suppose that a pro-poor program serves two households. The first household is poor (its per-capita or per-adult-equivalent consumption is less than a given poverty line), and it has three members, one of whom is a program participant. The second household is non-poor and has four members, two of whom are program participants.

Poverty rates are in terms of either households or people. If the program defines its *participants* as households, then the household level is relevant. The estimated household-level poverty rate is the weighted<sup>6</sup> average of poverty statuses (or estimated poverty likelihoods) across households with participants. This is

$$\frac{1 \cdot 1 + 1 \cdot 0}{1 + 1} = \frac{1}{2} = 0.5 = 50 \text{ percent.}$$
 In the “1 · 1” term in the numerator, the first “1” is

the first household’s household-level sampling weight, and the second “1” represents the first household’s poverty status (poor) or its estimated poverty likelihood. In the “1 · 0”

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<sup>6</sup> The examples in this paper assume simple random sampling at the household level. This means that each household has the same selection probability and thus the same household-level sampling weight, taken here to be one (1).

term in the numerator, the “1” is the second household’s household-level sampling weight, and the “0” represents the second household’s poverty status (non-poor) or its estimated poverty likelihood. The “1 + 1” in the denominator is the sum of the household-level sampling weights of the two households. Household-level sampling weights are used because the unit of analysis is the household.

### 2.2.2 Person-level estimates

Alternatively, a person-level rate is relevant if a program defines all people in the households that benefit from its services as *participants*. In the example here, the person-level rate is the household-size-weighted<sup>7</sup> average of poverty statuses (or estimated poverty likelihoods) for households with participants, that is,

$$\frac{3 \cdot 1 + 4 \cdot 0}{3 + 4} = \frac{3}{7} = 0.43 = 43 \text{ percent.}$$

In the “3 · 1” term in the numerator, the “3” is the first household’s person-level sampling weight because it has three members, and the “1” represents its poverty status (poor) or its estimated poverty likelihood. In the “4 · 0” term in the numerator, the “4” is the second household’s person-level sampling weight because it has four members, and the zero represents its poverty status (non-poor) or its estimated poverty likelihood. The “3 + 4” in the denominator is the sum of the person-level sampling weights of the two households. Person-level sampling weights are used because the unit of analysis is the household member.

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<sup>7</sup> Given simple random sampling at the household level, a household’s person-level weight is the number of people in the household.



### 2.2.3 Participant-level estimates

As a final example, a pro-poor program might count as *participants* only those household members who directly participate in the program. For the example here, this means that some—but not all—household members are counted. The estimated person-level poverty rate is then the participant-weighted average<sup>8</sup> of the poverty statuses (or estimated poverty likelihoods) of households with participants, that is,

$$\frac{1 \cdot 1 + 2 \cdot 0}{1 + 2} = \frac{1}{3} = 0.33 = 33 \text{ percent.}$$

The first “1” in the “1 · 1” in the numerator is the first household’s participant-level sampling weight because it has one participant, and the second “1” represents its poverty status (poor) or its estimated poverty likelihood. In the “2 · 0” term in the numerator, the “2” is the second household’s participant-level sampling weight because it has two participants, and the zero represents its poverty status (non-poor) or its estimated poverty likelihood. The “1 + 2” in the denominator is the sum of the participant-level sampling weights of the two households. Participant-level sampling weights are used because the unit of analysis is the participant.<sup>9</sup>

To sum up, estimated poverty rates are weighted averages of households’ poverty statuses (or estimated poverty likelihoods), where—assuming simple random sampling at the household level—the weights are the number of relevant units in the household.

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<sup>8</sup> Given simple random sampling at the household level, a household’s participant-level weight is the number of participants in that household.

<sup>9</sup> If all households with participants have (or are assumed to have) one participant each, then the participant-level poverty rate is the same as the household-level rate.

When reporting, organizations should clearly state the unit of analysis—whether households, household members, or participants—and explain why that unit is relevant.

Table 1 reports poverty lines and poverty rates for households and people in the 2015/16 KIHBS for Kenya as a whole and for each its 47 counties by urban/rural/all.<sup>10</sup>

Household-level poverty rates are reported because—as shown above—household-level poverty likelihoods can be straightforwardly converted into poverty rates for other units of analysis and because sampling is almost always done at the level of households. This is also why the scorecard is constructed, calibrated, and validated with household weights. Person-level poverty rates are also included in Table 1 because these are the rates reported by the government of Kenya. Furthermore, popular discussions and policy discourse usually proceed in terms of person-level rates, and the goal of pro-poor programs is to help people (not households) to improve their well-being.

### **2.3 Definition of *poverty*, and poverty lines**

A household's *poverty status* as poor or non-poor depends on whether its per-capita or per-adult-equivalent consumption (KES per person or per adult equivalent per day in median prices separately in urban and rural Kenya on average during the 2015/16 KIHBS field work) is below a given poverty line. Thus, a definition of *poverty* is a poverty line together with a measure of consumption.

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<sup>10</sup> The counties of Nairobi and Mombasa comprise only urban areas.

According to KNBS (2007, p. 23), the definition of a household’s aggregate consumption in the 2005/6 KIHBS generally follows the guidelines in Deaton and Zaidi (2002). The definition of consumption in the 2015/16 KIHBS is “in line” with that in the 2005/6 KIHBS (KNBS, 2018, pp. 23–25).

Because pro-poor programs in Kenya may want to use different or various poverty lines, this paper calibrates scores from its single scorecard to poverty likelihoods for 19 lines:

- Food
- 100% of national
- 150% of national
- 200% of national
- \$1.25/day 2005 PPP
- \$2.00/day 2005 PPP
- \$2.50/day 2005 PPP
- \$5.00/day 2005 PPP
- \$1.90/day 2011 PPP
- \$3.20/day 2011 PPP
- \$5.50/day 2011 PPP
- \$21.70/day 2011 PPP
- Line marking the poorest half of people below 100% of the national line
- First-decile (10<sup>th</sup>-percentile) line
- First-quintile (20<sup>th</sup>-percentile) line
- Second-quintile (40<sup>th</sup>-percentile) line
- Median (50<sup>th</sup>-percentile) line
- Third-quintile (60<sup>th</sup>-percentile) line
- Fourth-quintile (80<sup>th</sup>-percentile) line

### **2.3.1 Food poverty line, and national poverty line**

Kenya’s national poverty line (usually called here “100% of the national line”) is derived with the cost-of-basic-needs method (Ravallion, 1998) as the sum of a minimum standard for food consumption and a minimum standard for non-food consumption (KNBS, 2007, pp. 26–27; and KNBS, 2018, pp. 25–30).

#### **2.3.1.1 Food line**

The food standard is the cost of 2,251 Calories—valued at median prices separately for urban and rural areas in the 2015/16 KIHBS—of an urban food basket and a rural food basket. Through an iterative process (Pradhan *et al.*, 2001), the relevant food-basket reference group for the purposes of defining a poverty line is determined to be the 10<sup>th</sup> to 30<sup>th</sup> percentiles of the person-weighted distribution of per-adult-equivalent consumption (for urban households) and the 30<sup>th</sup> to 50<sup>th</sup> percentiles (for rural households). A given area’s food basket is made up of the 44 items that account for the largest shares of food consumption in that area in the KIHBS. The items in the basket are valued at their median prices in the given area, and the cost of an area’s basket is the food poverty line for the area.

In median prices in urban and rural areas separately on average in Kenya during field work for the 2015/16 KIHBS, the resulting all-Kenya food poverty line is KES71 per adult equivalent per day (Table 1). When compared with households’ total (food-

plus-non-food) consumption,<sup>11</sup> this food line gives an all-Kenya household-level poverty rate of 6.0 percent and a person-level rate of 8.6 percent. In urban areas, the food line is KES83 with poverty rates of 2.5 percent (households) and 3.9 percent (people). In rural areas, the food line is KES65 with poverty rates of 8.7 percent (households) and 11.2 percent (people).

### **2.3.1.2 National line**

Kenya’s national (food-plus-non-food) poverty line is the food line, plus a minimum standard of non-food consumption. For a given area, the non-food standard is defined as “the mean value of total non-food expenditures consumed by households whose food expenditures—[not total (food-plus-non-food) expenditures]—fall within a one-percentage-point interval around the food poverty line. This process is repeated ten times and, at each stage, the interval around the food poverty line is increased by an additional percentage point. The average of mean total non-food expenditures from each [of the ten] stages provides a [triangle] weighted non-parametric estimate of the value of the non-food component which is added to the food poverty line to obtain the overall [national (food-plus-non-food)] poverty line” (KNBS, 2007, p. 27).

In median prices in urban and rural areas separately on average in Kenya during field work for the 2015/16 KIHBS, the resulting all-Kenya national (food-plus-non-food) poverty line is KES136 per adult equivalent per day (Table 1). When compared with

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<sup>11</sup> What this paper calls the “food poverty line” is the same as what KNBS (2018, p. 44) calls the “hard-core or extreme poverty line”. The KNBS also has a “food poverty line” that it compares with food consumption, but—following common nomenclature—this paper compares its “food poverty line” with total (food-plus-non-food) consumption.

households' total (food-plus-non-food) consumption, this national line gives an all-Kenya household-level poverty rate of 27.4 percent and a person-level rate of 36.1 percent. In urban areas, 100% of the national line is KES186 with poverty rates of 20.7 percent (households) and 29.1 percent (people). In rural areas, 100% of the national line is KES108 with poverty rates of 32.5 percent (households) and 40.1 percent (people).<sup>12</sup>

150% and 200% of the national line are multiples of 100% of the national line.

### **2.3.1.3 Comparability of estimates of poverty rates based on national lines, 2005/6 and 2015/16**

Can estimated poverty rates from the old 2005/6 scorecard (Schreiner, 2011) be compared with estimates from the new 2015/16 scorecard? The answer hinges on whether the two KIHBS rounds collected data in the same way and whether the two rounds use the same definition of *poverty*.

KNBS (2018) notes some differences between the two rounds:

- Stratification changed from urban and rural for each of 69 districts to urban and rural for each of 47 counties
- The source of the sampling frame changed from the 1999 Census to the 2009 Census
- The food basket providing the minimum standard for food consumption was updated to reflect differences in relative prices and changes in what people eat
- The food-basket reference group was updated to reflect differences in poverty rates
- The exact quantities of consumption items reported in non-standard units (such as “heaps” or “bunches”) changed from being assumed to being elicited in standard units via follow-up questions

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<sup>12</sup> The all-Kenya poverty rates reported here for the food line and for 100% of the national line match those in KNBS (2018, p. 44), suggesting that this paper uses the same data and calculations as the KNBS.

For estimates at the national level, it should not matter that the stratification and the source of the sampling frame changed.

Likewise, it should not matter that the food basket and the food-basket reference group changed. In fact, these changes should make the definition of *poverty* more consistent over time than if the 2015/16 poverty lines were merely the 2005/6 lines, updated for inflation.

Knowing the exact quantities of consumption items, however, might matter for the comparability of estimates across rounds. But how it might matter (and to what extent) is not known. This paper follows KNBS (2018) in taking estimates from the two KIHBS rounds as comparable.

Together with the scorecard's standard assumptions (that the relationships between poverty and scorecard indicators are constant over time and that the composition of Kenya's population is also constant), this means that estimates from the old and new scorecards can be compared. Thus, legacy users of the old 2005/6 scorecard can estimate changes in poverty rates over time for national poverty lines (including the food line) with a baseline estimate from the old 2005/6 scorecard and a follow-up estimate from the new 2015/16 scorecard.

Of course, the scorecard's standard assumptions do not hold to some unknown extent. Furthermore, the consequences of the inevitable violations of the assumptions on the accuracy of estimates of changes is also not known.

Thus, estimates of changes in poverty rates over time for national poverty lines that are based on estimates from both the old and new scorecards should be reported and used with caution. What does this mean? Most fundamentally, caution means being honest and understanding that poverty-rate estimates do not fall from heaven and that their origins affect their quality. It means reporting the assumptions that must hold if the estimates are to mean what, on the face of it, they seem to mean, as well as speculating about (rather than ignoring) possible violations of the assumptions and the consequent possible inaccuracies in the estimates. Caution means explicitly considering the risk of inaccuracy and down-weighting estimates' importance in decision-making accordingly. Caution means being intentionally transparent about the judgments that inevitably figure in any decision based at least partly on estimates of uncertain accuracy. In sum, caution means being scientific in the sense of trying to continuously learn while still making wise choices with real-life constraints and currently imperfect knowledge. It means transparently discussing what is known and unknown, what is measured, estimated, or assumed. It means not only being honest with others but also not fooling yourself.<sup>13</sup>

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<sup>13</sup> Schreiner (2016a and 2014a) discusses the wise use of the scientific method in real-world decision-making.



### 2.3.2 International 2005 and 2011 PPP poverty lines

International 2005 and 2011 PPP lines are derived from:

- PPP exchange rates for Kenya for “individual consumption expenditure by households”:
  - 2005:<sup>14</sup> KES32.684 per \$1.00
  - 2011:<sup>15</sup> KES35.430 per \$1.00
- Consumer Price Index (CPI):<sup>16</sup>
  - Calendar-year 2005 average: 180.618
  - Calendar-year 2011 average: 339.635
  - Average during 2015/17 KIHBS field work: 465.805
- Average person-weighted price deflator by area:<sup>17</sup>
  - Urban: 1.0436786
  - Rural: 1.0071413
- Average person-weighted food poverty line by area:
  - Urban: 83.27
  - Rural: 64.68
- Population shares by area:
  - Urban: 0.3580
  - Rural: 0.6420

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<sup>14</sup> World Bank, 2008.

<sup>15</sup> [iresearch.worldbank.org/PovcalNet/Detail.aspx?Format=Detail&C0=KEN\\_3&PPP0=35.4296&PLO=1.90&Y0=2005&NumOfCountries=1](http://iresearch.worldbank.org/PovcalNet/Detail.aspx?Format=Detail&C0=KEN_3&PPP0=35.4296&PLO=1.90&Y0=2005&NumOfCountries=1), retrieved 25 June 2018.

<sup>16</sup> The monthly CPI is base = 100 in October 1997. It splices together CPI series from the KNBS ([knbs.or.ke/consumer-price-indices/#](http://knbs.or.ke/consumer-price-indices/#), retrieved 25 June 2018) as well as from the *Statistical Bulletin* of the Central Bank of Kenya for December 2006, December 2007 (revised), December 2009 (revised), December 2011, and December 2015 ([centralbank.go.ke/releases/statistical-bulletin/](http://centralbank.go.ke/releases/statistical-bulletin/), retrieved 25 June 2018).

<sup>17</sup> Kenya uses household-level deflators with two independent bases, urban and rural.

### 2.3.2.1 \$1.25/day 2005 PPP line

For Kenya overall, the \$1.25/day 2005 PPP line in median prices (separately in urban and rural areas) during field work for the 2015/16 KIHBS is

$$\text{\$1.25} \cdot \text{2005 PPP factor} \cdot \left( \frac{\text{CPI}_{\text{KIHBS15/16}}}{\text{CPI}_{2005}} \right) = \text{\$1.25} \cdot 32.684 \cdot \left( \frac{465.805}{180.618} \right) = \text{KES105.36}.$$

As noted above, Kenya's food poverty line and 100% of the national line are defined separately for urban and rural areas. In addition, each household has a unique price deflator with either an urban or rural base.

Analogous with the definitions of the food and national poverty lines, an appropriate \$1.25/day 2005 PPP line will have an all-urban value and an all-rural value, and a given household's price deflator is applied to the \$1.25/day line in that household's area.

What are the area-specific \$1.25/day lines? Given that no one else has suggested an approach for deriving PPP lines when a country has more than one base for its geographic price deflators, this paper follows Schreiner (2016c) for an similar case in India.

In particular, the all-Kenya \$1.25/day 2005 PPP line derived above (KES105.36) must equal the person-weighted average of the urban- and rural-specific \$1.25/day lines:

$$(\text{Urban pop. share} \cdot \text{Urban } \$1.25/\text{day}) + (\text{Rural pop. share} \cdot \text{Rural } \$1.25/\text{day}) = \text{KES105.36}.$$

Given this, a second condition is needed to determine a unique pair of area-specific \$1.25/day lines. Analogous to India (Schreiner, 2016c), this second condition is assumed to be that the ratio of the urban \$1.25/day line to the rural \$1.25/day line be equal to the ratio of the urban food line to the rural food line ( $83.27 \div 64.68 = 1.287$ ).<sup>18</sup>

The second condition is thus:

$$\text{\$1.25/day urban} \div \text{\$1.25/day rural} = \text{Urban food line} \div \text{Rural food line} = 1.287.$$

Combining the two conditions gives a rural \$1.25/day line of KES95.54 per person per day (with a household-level poverty rate of 38.9 percent and a person-level rate of 49.0 percent, Table 1) and an urban \$1.25/day line of KES122.96 (with a household-level poverty rate of 15.0 percent and a person-level rate of 23.9 percent). The all-Kenya line of KES105.36 then implies a household-level poverty rate of 28.5 percent and a person-level rate of 40.0 percent.

The lines for \$2.00/day, \$2.50/day, and \$5.00/day 2005 PPP are multiples of the \$1.25/day 2005 PPP line.

The World Bank's PovcalNet does not report poverty lines nor poverty rates for \$1.25/day 2005 PPP based on the 2015/16 KIHBS. Its most-recent, non-extrapolated figures are from the 2005/6 KIHBS.

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<sup>18</sup> Alternatively, the second condition could be that the ratio of the urban \$1.25/day line to the rural \$1.25/day line is equal to the ratio of the urban national line to the rural national line ( $186.16 \div 107.70 = 1.729$ ). The food line is used here for Kenya, as the use of the national line would compress the urban/rural difference between PPP poverty rates more than seems reasonable to this author.

### 2.3.2.2 \$1.90/day 2011 PPP line

Given the parameters in the previous sub-section, the \$1.25/day 2005 PPP line for Kenya overall in median prices (separately in urban and rural areas) during field work for the 2015/16 KIHBS is

$$\text{\$1.90} \cdot \text{2011 PPP factor} \cdot \left( \frac{\text{CPI}_{\text{KIHBS15/16}}}{\text{CPI}_{2011}} \right) = \text{\$1.90} \cdot 35.430 \cdot \left( \frac{465.805}{339.635} \right) = \text{KES92.32} .$$

Applying the same approach as used above to derive the \$1.25/day 2005 PPP lines gives a rural \$1.90/day 2011 PPP line of KES83.71 per person per day (with a household-level poverty rate of 31.2 percent and a person-level rate of 40.0 percent, Table 1). The urban \$1.90/day line is KES107.76 (with a household-level poverty rate of 11.1 percent and a person-level rate of 18.4 percent). The all-Kenya line of KES92.32 implies a household-level poverty rate of 22.4 percent and a person-level rate of 32.2 percent.

The 2011 PPP poverty lines for \$3.20/day, \$5.50/day, and \$21.70/day are multiples of the \$1.90/day line.<sup>19</sup>

PovcalNet does not report poverty figures for \$1.90/day 2011 PPP based on the 2015/16 KIHBS. Its most-recent, non-extrapolated figures come from the 2005/6 KIHBS.

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<sup>19</sup> Jolliffe and Prydz (2016) discuss the World Bank's choice of the four 2011 PPP lines.

### **2.3.2.3 Comparability of estimates of poverty rates based on international PPP lines, 2005/6 and 2015/16**

Estimated poverty rates based on 2005 or 2011 PPP lines from the old 2005/6 scorecard *cannot* be compared with estimates from the new 2015/16 scorecard here because Schreiner (2011)—likely like the World Bank’s PovcalNet—failed to account for the distinct bases used in 2005/6 for urban and rural price deflators.

This means that the old 2005/6 scorecard is calibrated to urban PPP lines that are too low (making its estimated urban poverty rates too low) and to rural PPP lines that are too high (making its estimated rural poverty rates too high).

Thus, legacy users of the old 2005/6 scorecard *cannot* estimate changes in poverty rates over time for international 2005 or 2011 PPP lines with a baseline from the old 2005/6 scorecard and a follow-up from the new 2015/16 scorecard. It is possible to calibrate the new scorecard to PPP lines that replicate the mistake in Schreiner (2011) and thus allow the combination of estimates from the old and new scorecards, but it has not been done here.

### **2.3.3 Relative poverty lines**

#### **2.3.4.1 USAID “very poor” line**

Microenterprise programs in Kenya that use the scorecard to report the number of their participants who are “very poor” to USAID should use the \$1.90/day 2011 PPP line. This is because USAID defines the “very poor” as those people in households whose daily per-capita consumption is below the highest of the following two poverty lines (U.S. Congress, 2004):

- The line that marks the poorest half of people below 100% of the national line (KES68, with a person-level poverty rate of 18.1 percent, Table 1)
- The \$1.90/day 2011 PPP line (KES92, with a person-level poverty rate of 32.2 percent)

#### **2.3.4.2 Percentile-based lines**

The scorecard for Kenya also supports percentile-based poverty lines.<sup>20</sup> This facilitates a number of types of analyses. For example, the second-quintile (40<sup>th</sup>-percentile) line might be used to help track Kenya’s progress toward the World Bank’s (2013) goal of “shared prosperity/inclusive economic growth”, defined as income growth among the bottom 40 percent of the world’s people.

The four quintile lines, analyzed together, can also be used to look at the relationship of consumption with health outcomes (or anything else related with the distribution of consumption). The scorecard thus offers an alternative for health-equity

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<sup>20</sup> Following the asset index associated with the Demographic and Health Surveys, percentiles are in terms of people (not households) for Kenya as a whole. For example, the all-Kenya person-level poverty rate for the first-quintile (20<sup>th</sup>-percentile) poverty line is 20 percent (Table 1). The household-level poverty rate for that same line is not 20 percent but rather 13.5 percent.

analyses that typically have used a “wealth index” such as that supplied with the data from the Demographic and Health Surveys (Rutstein and Johnson, 2004) to compare some estimate of wealth with health outcomes.

Of course, relative-wealth analyses were always possible (and still are possible) with scores from the scorecard. But support for relative consumption lines allows for a more straightforward use of a single tool to analyze any or all of:

- Relative wealth (via scores)
- Absolute consumption (via poverty likelihoods and absolute poverty lines)
- Relative consumption (via poverty likelihoods and percentile-based poverty lines)

Unlike the scorecard, asset indexes serve only to analyze relative wealth.

Furthermore, the scorecard—unlike asset indexes based on Principal Component Analysis or similar approaches—uses a straightforward, well-understood poverty standard whose definition is external to the tool itself (consumption relative to a poverty line defined in monetary units).

In contrast, an asset index opaquely defines *poverty* in terms of its own indicators and points, without reference to an external standard. This means that two asset indexes with different indicators or different points—even if derived from the same data for a given country—imply two different definitions of *poverty*. In the same set-up, two scorecards would provide comparable estimates under a single definition of *poverty*.

#### **2.3.4.3 Comparability of estimates of poverty rates based on relative poverty lines, 2005/6 and 2015/16**

The definition of a relative poverty line changes each time it is derived with data from a new KIHBS round. Thus, estimates *cannot* be compared across the old 2005/6 scorecard and the new 2015/16 scorecard for percentile lines nor for the line marking the poorest half of people below 100% of the national line. This is the nature of relative poverty lines.



### 3. Scorecard construction

For Kenya, about 75 candidate indicators are initially prepared in the areas of:

- Household composition (such as the number of household members)
- Education (such as whether the male head/spouse can read and write in any language)
- Housing (such as the predominant material of the wall)
- Ownership of durable assets (such as televisions or mobile phones)

Table 2 lists the candidate indicators, ordered by the entropy-based “uncertainty coefficient” (Goodman and Kruskal, 1979) that measures how well a given indicator predicts poverty status on its own.<sup>21</sup>

One possible application of the scorecard is to estimate changes in poverty rates. Thus, when selecting indicators—and holding other considerations constant—preference is given to more sensitive indicators. For example, the possession of a television is probably more likely to change in response to changes in socio-economic status than is the age of the male head/spouse.

The scorecard itself is built using 100% of the national poverty line and Logit regression on the construction sub-sample. Indicator selection is based on both judgment and statistics. The first step is to use Logit to build one scorecard for each candidate indicator. The power of each one-indicator scorecard to rank households by poverty status is measured as “c” (SAS Institute Inc., 2004).

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<sup>21</sup> The uncertainty coefficient is not used when selecting scorecard indicators. It is only used as a way to order the candidate indicators listed in Table 2.

One of these one-indicator scorecards is then selected based on several factors (Schreiner *et al.*, 2014; Zeller, 2004). These include improvement in accuracy, likelihood of acceptance by users (determined by simplicity, cost of collection, and “face validity” in terms of experience, theory, and common sense), sensitivity to changes in consumption, variety among types of indicators, applicability across regions, tendency to have a slow-changing relationship with poverty over time, relevance for distinguishing among households at the poorer end of the distribution of consumption, and verifiability.

A series of two-indicator scorecards are then built, each adding a second indicator to the one-indicator scorecard selected from the first stage. The best two-indicator scorecard is then selected, again using judgment to balance statistical accuracy with the non-statistical criteria. These steps are repeated until the scorecard has 10 indicators that work well together.

The final step is to transform the Logit coefficients into non-negative integers such that total scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line).

This algorithm is similar to common  $R^2$ -based stepwise least-squares regression. It differs from naïve stepwise in that the selection of indicators considers both statistical<sup>22</sup> and non-statistical criteria. The use of non-statistical criteria can improve robustness through time and across non-nationally representative groups. It also helps ensure that indicators are straightforward, common-sense, inexpensive-to-collect, and acceptable to users.

The single scorecard here applies to all of Kenya. Segmenting poverty-assessment tools by urban/rural does not improve targeting accuracy much. This is reported for nine countries in Sub-Saharan Africa (Brown, Ravallion, and van de Walle, 2016)<sup>23</sup>, Indonesia (World Bank, 2012), Bangladesh (Sharif, 2009), India and Mexico (Schreiner, 2006 and 2005a), Sri Lanka (Narayan and Yoshida, 2005), and Jamaica (Grosh and Baker, 1995). In general, segmentation may improve the accuracy of estimates of poverty rates (Diamond *et al.*, 2016; Tarozzi and Deaton, 2009), but it may also increase the risk of overfitting (Haslett, 2012).

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<sup>22</sup> The statistical criterion for selecting an indicator is not the  $p$  values of its coefficients but rather the indicator's contribution to the ranking of households by poverty status.

<sup>23</sup> These are Burkina Faso, Ethiopia, Ghana, Malawi, Mali, Niger, Nigeria, Tanzania, and Uganda. On average across these countries when targeting people in the lowest quintile or in the lowest two quintiles of scores and when 20 or 40 percent of people are poor, segmenting by urban/rural increases the number of poor people successfully targeted by about one per 200 or one per 400 poor people.

## 4. Practical guidelines for scorecard use

The main challenge of scorecard design is not to maximize statistical accuracy but rather to improve the chances that the scorecard is actually used and used properly (Schreiner, 2005b). When scorecard projects fail, the reason is not usually statistical inaccuracy but rather the failure of an organization to decide to do what is needed to integrate the scorecard in its processes and to train and convince its employees to use the scorecard properly (Schreiner, 2002). After all, most reasonable scorecards have similar targeting accuracy, thanks to the empirical phenomenon known as the “flat maximum” (Caire and Schreiner, 2012; Hand, 2006; Baesens *et al.*, 2003; Lovie and Lovie, 1986; Kolesar and Showers, 1985; Stillwell, Barron, and Edwards, 1983; Dawes, 1979; Wainer, 1976; Myers and Forgy, 1963). The bottleneck is less technical and more human, not statistics but organizational-change management. Accuracy is easier to achieve than adoption.

The new scorecard for Kenya is designed to encourage understanding and trust so that users will want to adopt it on their own and use it properly. Of course, accuracy matters, but it must be balanced with cost, ease-of-use, and “face validity”. Programs are more likely to collect data, compute scores, and pay careful attention to the results if, in their view, the scorecard does not imply a lot of additional work and if the whole process generally seems to them to make sense.

To this end, Kenya’s scorecard fits on one page. The construction process, indicators, and points are straightforward and transparent. Additional work is minimized; non-specialists can compute scores by hand in the field because the scorecard has:

- Only 10 indicators
- Only “multiple-choice” indicators
- Only simple points (non-negative integers, and no arithmetic beyond addition)

The scorecard (and its “Back-page Worksheet”) is ready to be photocopied. A field worker using Kenya’s scorecard would:

- Record the interview identifier, interview date, country code (“KEN”), scorecard code (“003”) and the sampling weight assigned to the household of the participant by the organization’s survey design (if known)
- Record the names and identifiers of the participant (who is not necessarily the same as the respondent), of the field agent who is the participant’s main point of contact with the organization (who is not necessarily the same as the enumerator), and of the organizational service point that is relevant for the participant (if there is such a service point)
- Complete the “Back-page Worksheet” with each household member’s:
  - First name (or nickname)
  - Age
  - Status as the head of the household or as the spouse of the head
  - Possession of a mobile phone
  - Economic-disability status
  - Status in non-agricultural self-employment/business-ownership (if 6-years-old or older)
  - Status as a casual worker (if 6-years-old or older)
- Based on the “Back-page Worksheet”, record household size (that is, the number of household members) in the scorecard header next to “Number of household members:”
- Mark the response to the first scorecard indicator (“How many household members are there?”) based on what has been recorded on the “Back-page Worksheet”
- Based on the “Back-page Worksheet”, mark the response to the second scorecard indicator (“How many household members have a mobile phone?”)

- Based on the “Back-page Worksheet”, mark the response to the third scorecard indicator (“Do any household members have a disability that gives them difficulties in engaging in an economic activity?”)
- Based on the “Back-page Worksheet”, mark the response to the fourth scorecard indicator (“In the last 7 days, did any household members work at least one hour on their own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on?”)
- Based on the “Back-page Worksheet”, mark the response to the fifth scorecard indicator (“In the last 7 days, were any household members casual workers in their main/primary job?”)
- Read the rest of the scorecard indicators to the respondent one-by-one. Circle each of the responses and their points, and write each point value in the far right-hand column
- Add up the points to get a total score (if desired)
- Implement targeting policy (if any) based on the score
- Deliver the paper scorecard to a central office for data entry and filing

Of course, field workers must be trained. The quality of outputs depends on the quality of inputs. The training of field workers should be based solely on the “Interview Guide” found after the “References” in this document.

If organizations or field workers gather their own data and if they believe that they have an incentive to exaggerate poverty rates (for example, if managers or funders reward them for higher poverty rates), then it is wise to do on-going quality control via data review and random audits (Matul and Kline, 2003).<sup>24</sup> IRIS Center (2007a) and Toohig (2008) are useful nuts-and-bolts guides for logistics, budgeting, training field

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<sup>24</sup> If a program does not want field workers or respondents to know the points associated with responses, then it can provide a version of the scorecard that does not display the points and then apply the points and compute scores later at a central office. Even if points are hidden, however, field workers and respondents can use common sense to guess how response options are linked with poverty. Schreiner (2012b) argues that hiding points in Colombia (Camacho and Conover, 2011) did little to deter cheating and that, in any case, cheating by the user’s central office was more damaging than cheating by field workers and respondents.

workers and supervisors, sampling, interviewing, piloting, recording data, and controlling quality. Schreiner (2014a) explains how to compute estimates and analyze them.

While collecting scorecard indicators is relatively easier than alternative ways of assessing poverty, it is still absolutely difficult. Training and explicit definitions of the terms and concepts in the scorecard are essential, and field workers should scrupulously study and follow the “Interview Guide” found after the “References” section in this paper, as this “Interview Guide”—along with the “Back-page Worksheet”—is an integral part of the scorecard.<sup>25</sup>

For the example of Nigeria, one study (Onwujekwe, Hanson, and Fox-Rushby, 2006) found distressingly low inter-rater and test-retest correlations for indicators as seemingly incontrovertible as whether a household owns an automobile. Yet Grosh and Baker (1995) suggest that gross underreporting of assets does not affect targeting. For the first stage of targeting in a conditional cash-transfer program in Mexico, Martinelli and Parker (2007, pp. 24–25) find that “under-reporting [of asset ownership] is widespread but not overwhelming, except for a few goods . . . [and] over-reporting is common for a few goods”. Still, as is done in Mexico in the second stage of its targeting process, most false self-reports can be corrected (or avoided in the first place) by field

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<sup>25</sup> The guidelines here are the only ones that organizations should give to field workers. All other issues of interpretation should be left to the judgment of field workers and respondents, as this seems to be what Kenya’s KNBS did in the 2015/16 KIHBS.

workers who make a home visit. This is the recommended procedure for organizations that use the scorecard for targeting in Kenya.

In terms of implementation and sampling design, an organization must make choices about:

- Who will do the interviews
- Where interviews will be done
- How responses and scores will be recorded
- Which households of participants will be interviewed
- How many households of participants will be interviewed
- How frequently households of participants will be interviewed
- Whether the scorecard will be applied at more than one point in time
- Whether the same households of participants will be scored at more than one point in time

In general, the sampling design should follow from the organization's goals for the exercise, the questions to be answered, and the budget. The main goals should be to make sure that the sample is representative of a well-defined population and that the use of the scorecard will inform issues that matter to the organization.

The non-specialists who apply the scorecard in the field with the households of an organization's participants can be:

- Employees of the organization
- Third parties

There is only one correct, on-label way to do interviews: in-person, at the sampled household's residence, with an enumerator trained to follow the "Interview Guide". This is how the KNBS did interviews in Kenya's 2015/16 KIHBS, and this provides the most-accurate and most-consistent data (and thus the best estimates).



Of course, it is possible to do interviews in other ways such as:

- Without an enumerator (for example, respondents fill out paper or web forms on their own or answer questions sent via e-mail, text messaging, or automated voice-response systems)
- Away from the residence (for example, at an organizational service point or at a group-meeting place)
- Not in-person (for example, an enumerator interviewing by phone)

While such off-label methods may reduce costs, they also affect responses (Schreiner, 2015a) and thus reduce the accuracy of scorecard estimates. This is why interviewing by a trained enumerator at the residence is recommended and why other, off-label methods are not recommended.

In some contexts—such as when an organization’s field agents do not already visit participants periodically at home anyway—the organization might judge that the lower costs an off-label approach are enough to compensate for less-accurate estimates. The business wisdom of off-label methods depends on context-specific factors that an organization must judge for itself. To judge carefully, an organization that is considering an off-label method should do a test to check how responses differ with the off-label method versus with a trained enumerator at the residence. Furthermore, any reporting should note the use of the off-label data-collection method and discuss its possible consequences.

Responses, scores, and poverty likelihoods can be recorded by enumerators on:

- Paper in the field, and then filed at a central office
- Paper in the field, and then keyed into a database or spreadsheet at a central office
- Portable electronic devices in the field, and then uploaded to a database<sup>26</sup>

Given a population of participants relevant for a particular business question, the participants whose households will be interviewed can be:

- All relevant participants (a census)
- A representative sample of relevant participants
- All relevant participants in a representative sample of relevant field offices and/or in a representative sample of relevant field agents
- A representative sample of relevant participants in a representative sample of relevant field offices and/or in a representative sample of relevant field agents

If not determined by other factors, the number of participants whose households are to be interviewed can be derived from sample-size formulas (presented later) to achieve a desired confidence level and a desired confidence interval. To have the best chance to meaningfully inform questions that matter to the organization, however, the focus should be less on having a sample size large enough to achieve some arbitrary level of statistical significance and more on having a representative sample from a well-defined population that is relevant for issues that matter to the organization. In practice, errors due to implementation issues and due to interviewing a non-representative sample can easily swamp errors due to having a somewhat smaller sample size.

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<sup>26</sup> The author of this paper can support organizations that want to set up a system to collect data with portable electronic devices in the field or to capture data in a database at the office once paper forms come in from the field. Support is also available for automating the calculation of estimates as well as for reporting and analysis.

The frequency of application can be:

- As a once-off project (precluding estimating change)
- Every three years (or at any other fixed or variable time interval, allowing estimating change)
- Each time a field worker visits a participant at home (allowing estimating change)

If a scorecard is applied more than once in order to estimate changes in poverty rates, then it can be applied:

- With a different set of participants from the same population
- With the same set of participants

An example set of choices is illustrated by BRAC and ASA, two microfinance organizations in Bangladesh who each have about 7 million participants and who declared their intention to apply the scorecard for Bangladesh (Schreiner, 2013a) with a sample of about 25,000 participants. Their design is that all loan officers in a random sample of branches score all participants each time the loan officers visit a homestead (about once a year) as part of their standard due diligence prior to loan disbursement. The loan officers record responses on paper in the field before sending the forms to a central office to be entered into a database and converted to poverty likelihoods.

## 5. Estimates of a household's poverty likelihood

The sum of scorecard points for a household is called the *score*. For Kenya, scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). While higher scores indicate less likelihood of being poor, the scores themselves have only relative units. For example, doubling the score decreases the likelihood of being below a given poverty line, but it does not cut it in half.

To get absolute units, scores are converted to *poverty likelihoods*, that is, probabilities of being below a poverty line. This is done via easy-to-use look-up tables. For the example of 100% of the national line, scores of 42–44 have a poverty likelihood of 43.2 percent, and scores of 45–47 have a poverty likelihood of 33.9 percent (Table 3).

The poverty likelihood associated with a score varies by poverty line. For example, scores of 42–44 are associated with a poverty likelihood of 43.2 percent for 100% of the national line but of 36.5 percent for the \$1.90/day 2011 PPP line.<sup>27</sup>

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<sup>27</sup> From Table 3 on, many tables have 19 versions, one for each of the 19 supported poverty lines. To keep them straight, they are grouped by line. Single tables pertaining to all lines appear with the first group of tables for 100% of the national line.

## 5.1 Calibrating scores with poverty likelihoods

A given score is associated (“calibrated”) with a *poverty likelihood* that is defined as the share of households in the calibration sub-sample who have the score and who have per-capita or per-adult-equivalent consumption below a given poverty line.

For the example of 100% of the national line and a score of 42–44 (Table 4), there are 4,795 (normalized) households in the calibration sample. Of these, 2,074 (normalized) are below the poverty line. The estimated poverty likelihood associated with a score of 42–44 is then 43.2 percent, because  $2,074 \div 4,795 = 43.2$  percent.

To illustrate with 100% of the national line and a score of 45–47, there are 5,447 (normalized) households in the calibration sub-sample, of whom 1,848 (normalized) are below the line (Table 4). The poverty likelihood for this score range is then  $1,848 \div 5,447 = 33.9$  percent.

The same method is used to calibrate scores with estimated poverty likelihoods for all 19 poverty lines.<sup>28</sup>

Even though the scorecard is constructed partly based on judgment related to non-statistical criteria, the calibration process produces poverty likelihoods that are objective, that is, derived from monetary poverty lines and from survey data on consumption. The calibrated poverty likelihoods would be objective even if the process

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<sup>28</sup> To ensure that poverty likelihoods never increase as scores increase, likelihoods across pairs of adjacent scores may be iteratively averaged before grouping scores into ranges. This preserves unbiasedness while keeping users from balking when sampling variation in score ranges with few households would otherwise lead to higher scores being linked with higher poverty likelihoods.

of selecting indicators and points did not use any data at all. In fact, objective scorecards of proven accuracy are often constructed using only expert judgment to select indicators and points (Fuller, 2006; Caire, 2004; Schreiner *et al.*, 2014). Of course, the scorecard here is constructed with both data and judgment. The fact that this paper acknowledges that some choices in scorecard construction—as in any statistical analysis—are informed by judgment in no way impugns the objectivity of the poverty likelihoods, as their objectivity depends on using data in score calibration, not on using data (and nothing else) in scorecard construction.

Although the points in Kenya’s scorecard are transformed coefficients from a Logit regression, (untransformed) scores are not converted to poverty likelihoods via the Logit formula of  $2.718281828^{\text{score}} \times (1 + 2.718281828^{\text{score}})^{-1}$ . This is because the Logit formula is esoteric and difficult to compute by hand. It is more intuitive to define the poverty likelihood as the share of households with a given score in the calibration sample who are below a poverty line. Going from scores to poverty likelihoods in this way requires no arithmetic at all, just a look-up table. This approach to calibration can also improve accuracy, especially with large samples.

## 5.2 Accuracy of estimates of households' poverty likelihoods

As long as the relationships between indicators and poverty do not change over time, and as long as the scorecard is applied to samples of households who are representative of the same population as that from which the scorecard was originally constructed, then this calibration process produces unbiased estimates of poverty likelihoods. *Unbiased* means that in repeated samples from the same population, the average estimate matches the population's true value. Given the assumptions above, the scorecard also produces unbiased estimates of poverty rates at a point in time and unbiased estimates of the change in poverty rates between two points in time.<sup>29</sup>

Of course, the relationships between indicators and poverty do change to some unknown extent over time, and they also vary across sub-national groups in Kenya's population. Thus, scorecard estimates will generally have errors when applied after August 2016 (the last month of field work for the 2015/16 KIHBS) or when applied with sub-groups that are not nationally representative.

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<sup>29</sup> This is because these estimates of populations' poverty rates are linear functions of the unbiased estimates of households' poverty likelihoods.

How accurate are estimates of households' poverty likelihoods, given the assumption of unchanging relationships between indicators and poverty over time and the assumption of a sample that is representative of Kenya as a whole? To find out, the scorecard is applied to 1,000 bootstrap samples of size  $n = 16,384$  from the validation sample. Bootstrapping means to:

- Score each household in the validation sample
- Draw a bootstrap sample *with replacement* from the validation sample, accounting for household-level sampling weights
- For each score range, compute the observed poverty likelihood in the bootstrap sample, that is, the share of households with the score and with consumption below a poverty line
- For each score range, record the difference between the estimated poverty likelihood (Table 3) and the observed poverty likelihood in the bootstrap sample
- Repeat the previous three steps 1,000 times
- For each score range, report the average difference between estimated and observed poverty likelihoods across the 1,000 bootstrap samples
- For each score range, report the intervals containing the central 900, 950, and 990 differences between estimated and observed poverty likelihoods

For each score range and for  $n = 16,384$ , Table 5 shows the errors in the estimates of poverty likelihoods, that is, the average of differences between the estimates and observed values. It also shows confidence intervals for the errors.

For 100% of the national line and on average across bootstrap samples from the validation sample, the estimated poverty likelihood for scores of 42–44 (43.2 percent, Table 3) is too low by 0.3 percentage points. For scores of 45–47, the estimate is too low by 15.4 percentage points.<sup>30</sup>

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<sup>30</sup> These differences are not zero, in spite of the estimator's unbiasedness, because the scorecard comes from a single sample. The average difference by score would be zero if



The 90-percent confidence interval for the differences for scores of 42–44 is  $\pm 3.4$  percentage points (Table 5). This means that in 900 of 1,000 bootstraps, the average difference between the estimate and the observed value for households in this score range is between  $-3.7$  and  $+3.1$  percentage points (because  $-0.3 - 3.4 = -3.7$ , and  $-0.3 + 3.4 = +3.1$ ). In 950 of 1,000 bootstraps (95 percent), the difference is  $-0.3 \pm 4.1$  percentage points, and in 990 of 1,000 bootstraps (99 percent), the difference is  $-0.3 \pm 5.3$  percentage points.

Some of the absolute errors between estimated and observed poverty likelihoods in Table 5 for 100% of the national line are large. The differences are at least partly due to the fact that the validation sample is a single sample that—thanks to sampling variation—differs in distribution from the construction/calibration sub-sample and from the population of Kenya. For targeting, however, what matters is less the difference in all score ranges and more the differences in the score ranges just above and just below the targeting cut-off. This mitigates the effects of error and sampling variation on targeting (Friedman, 1997). Section 8 below looks at targeting accuracy in detail.

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samples were repeatedly drawn from the population and split into sub-samples before repeating the entire process of scorecard construction/calibration and validation.

In addition, if estimates of populations' poverty rates are to be usefully accurate, then errors for individual households' poverty likelihoods must largely balance out. As discussed in the next section, this is generally the case for nationally representative samples in 2015/16 in Kenya, although it will hold less well for samples from sub-national populations and in other time periods.

Another possible source of errors between estimates and observed values is overfitting. The scorecard here is unbiased, but it may still be *overfit* when applied after the end of the KIHBS field work in August 2016. That is, the scorecard may fit the construction/calibration data from 2015/16 so closely that it captures not only some real patterns that exist in the population of Kenya but also some random patterns that, due to sampling variation, show up only in the 2015/16 KIHBS construction/calibration data. Or the scorecard may be overfit in the sense that it is not robust when relationships between indicators and poverty change over time or when the scorecard is applied to sub-groups that are not nationally representative.

Overfitting can be mitigated by simplifying the scorecard and by not relying only on data but rather also considering theory, experience, and judgment. Of course, the scorecard here does this. Combining scorecards can also reduce overfitting, at the cost of greater complexity.

Most errors in individual households' likelihoods do balance out in the estimates of poverty rates for nationally representative samples (see the next two sections). Furthermore, at least some of the differences in change-over-time estimates come from non-scorecard sources such as changes in the relationships between indicators and poverty, sampling variation, changes in poverty lines, inconsistencies in data quality across time, and imperfections in price adjustments across time and across geographic regions. These factors can be addressed only by improving the availability, frequency, quantity, and quality of data from national consumption surveys (which is beyond the scope of the scorecard) or by reducing overfitting (which likely has limited returns, given the scorecard's parsimony).

## 6. Estimates of a poverty rate at a point in time

A population's estimated poverty rate at a point in time is the average of the estimated poverty likelihoods of the sampled households.

To illustrate, suppose a program samples three households on 1 January 2019 and that they have scores of 20, 30, and 40, corresponding to estimated poverty likelihoods of 80.4, 64.6, and 48.2 percent (100% of the national line, Table 3). The population's estimated poverty rate is the households' average poverty likelihood of  $(80.4 + 64.6 + 48.2) \div 3 = 64.4$  percent.<sup>31</sup>

Be careful; the population's estimated poverty rate is *not* the poverty likelihood associated with the average score. Here, the average score is 30, which corresponds to an estimated poverty likelihood of 64.6 percent. This differs from the 64.4 percent found as the average of the three individual poverty likelihoods associated with each of the three scores. Unlike poverty likelihoods, scores are ordinal symbols, like letters in the alphabet or colors in the spectrum. Because scores are not cardinal numbers, they cannot meaningfully be added up or averaged across households. Only three operations are valid for scores: conversion to poverty likelihoods, analysis of distributions (Schreiner, 2012a), or comparison—if desired—with a cut-off for segmentation. There are a few contexts in which the analysis of scores is appropriate, but, in general, the

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<sup>31</sup> This example assumes simple random sampling (or a census) and analysis at the level of households so that each household's household-level weight is one (1). The weights would differ by household if there were stratified sampling or—as discussed in Section 2—if the analysis were at the level of the person or at the level of the participant.

safest rule to follow is: If you are not completely sure what to do, then use poverty likelihoods, not scores.

Scores from the scorecard are calibrated with data from the 2015/16 KIHBS for all 19 poverty lines. The process of calibrating scores to poverty likelihoods and the approach to estimating poverty rates is exactly the same for all poverty lines. For users, the only difference in terms of what they do with one poverty line versus with another has to do with the specific look-up table used to convert scores to poverty likelihoods.

## **6.1 Accuracy of estimated poverty rates at a point in time**

For the scorecard applied to 1,000 bootstraps of  $n = 16,384$  for 100% of the national line, the average error (average difference between the estimate and observed value in the validation sample) for a poverty rate at a point in time is +0.2 percentage points (Table 7, which summarizes Table 6 across all poverty lines). For the 19 poverty lines in the validation sample, the maximum of the absolute values of the error is 7.0 percentage points, and the average of the absolute values of the average errors is about 2.9 percentage points. At least part of these differences is due to sampling variation in the division of the 2015/16 KIHBS into sub-samples. The average of the absolute values of the average errors are much lower for the four national lines (about 0.3 percentage points) than for the international 2005 and 2011 PPP lines (about 3.8 percentage points) and for the relative lines (about 3.3 percentage points).

When estimating poverty rates at a point in time for a given poverty line, the error reported in Table 7 should be subtracted from the average poverty likelihood to give a corrected estimate. For the example of the scorecard and 100% of the national line in the validation sample, the error is about +0.2 percentage points, so the corrected estimate in the three-household example above is  $66.4 - (+0.2) = 64.2$  percent.

In terms of precision, the 90-percent confidence interval for a population's estimated poverty rate at a point in time with  $n = 16,384$  is  $\pm 0.8$  percentage points or smaller for all poverty lines (Table 7). Given the scorecard's standard assumptions, this means that in 900 of 1,000 bootstraps of this size, the estimate (after correcting for the known average error) is within 0.8 percentage points of the observed value.

For example, suppose that the (uncorrected) average poverty likelihood in a sample of  $n = 16,384$  with the scorecard and 100% of the national line is 66.4 percent. Then estimates in 90 percent of such samples would be expected to fall in the range of  $66.4 - (+0.2) - 0.6 = 65.6$  percent to  $66.4 - (+0.2) + 0.6 = 66.8$  percent, with the most likely observed value being the corrected estimate in the middle of this range, that is,  $66.4 - (+0.2) = 66.2$  percent. This is because the original (uncorrected) estimate is 66.4 percent, the average error is about +0.2 percentage points, and the 90-percent confidence interval for 100% of the national line in the validation sample with this sample size is  $\pm 0.6$  percentage points (Table 7).

## 6.2 Formula for standard errors for estimates of poverty rates

How precise are the point-in-time estimates? Because these estimates are averages, they have (in “large” samples) a Normal distribution and can be characterized by their error (average difference vis-à-vis observed values), together with their standard error (precision).

Schreiner (2008) proposes an approach to deriving a formula for the standard errors of estimated poverty rates at a point in time from indirect estimation via a poverty-assessment tool. It starts with Cochran’s (1977) textbook formula of  $\pm c = \pm z \cdot \sigma$  that relates confidence intervals with standard errors in the case of the direct measurement of ratios, where:

$\pm c$  is a confidence interval as a proportion (*e.g.*,  $\pm 0.02$  for  $\pm 2$  percentage points),

$z$  is from the Normal distribution and is  $\begin{cases} 1.04 \text{ for confidence levels of 70 percent} \\ 1.28 \text{ for confidence levels of 80 percent,} \\ 1.64 \text{ for confidence levels of 90 percent} \end{cases}$

$\sigma$  is the standard error of the estimated poverty rate, that is,  $\sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \phi$ ,

$\hat{p}$  is the estimated proportion of households below the poverty line in the sample,

$\phi$  is the finite population correction factor  $\sqrt{\frac{N - n}{N - 1}}$ ,

$N$  is the population size, and

$n$  is the sample size.

For example, Kenya’s 2015/16 KIHBS gives a direct-measure household-level poverty rate for 100% of the national line of  $\hat{p} = 27.4$  percent (Table 1).<sup>32</sup> If this measure came from a sample of  $n = 16,384$  households from a population  $N$  of 11,414,543 (the number of households in Kenya in 2015/16 according to the KIHBS sampling weights), then the finite population correction  $\phi$  is  $\sqrt{\frac{11,414,543 - 16,384}{11,414,543 - 1}} = 0.9993$ , which is very close to  $\phi = 1$ . If the desired confidence level is 90-percent ( $z = 1.64$ ), then the confidence interval  $\pm c$  is

$$\pm z \cdot \sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}} = \pm 1.64 \cdot \sqrt{\frac{0.274 \cdot (1 - 0.274)}{16,384}} \cdot \sqrt{\frac{11,414,543 - 16,384}{11,414,543 - 1}} = \pm 0.571$$

percentage points. If  $\phi$  were taken as 1, then the interval is still  $\pm 0.571$  percentage points.

Unlike the 2015/16 KIHBS, however, the scorecard does not measure poverty directly, so this formula is not applicable. To derive a formula for the scorecard, consider Table 6, which reports empirical confidence intervals  $\pm c$  for the errors for the scorecard applied to 1,000 bootstrap samples of various sizes from the validation sample. For example, with  $n = 16,384$  and 100% of the national line in the validation sample, the 90-percent confidence interval is  $\pm 0.582$  percentage points.<sup>33</sup>

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<sup>32</sup> The analysis here ignores that poverty-rate estimates from the KIHBS are themselves based on a sample and so have their own sampling distribution.

<sup>33</sup> Due to rounding, Table 6 displays 0.6, not 0.582.



Thus, the scorecard’s 90-percent confidence interval with  $n = 16,384$  is  $\pm 0.582$  percentage points, while the interval for direct measurement is  $\pm 0.571$  percentage points. The ratio of the two intervals is  $0.582 \div 0.571 = 1.02$ .

Now consider the same exercise, but with  $n = 8,192$ . The confidence interval under direct measurement and 100% of the national line in the validation sample is

$$\pm 1.64 \cdot \sqrt{\frac{0.274 \cdot (1 - 0.274)}{8,192}} \cdot \sqrt{\frac{11,414,543 - 8,192}{11,414,543 - 1}} = \pm 0.808 \text{ percentage points.}$$

The empirical confidence interval with the scorecard (Table 6) is  $\pm 0.780$  percentage points.

Thus for  $n = 8,192$ , the ratio of the two intervals is  $0.780 \div 0.808 = 0.97$ .

This ratio of 0.97 for  $n = 8,192$  is not far from the ratio of 1.02 for  $n = 16,384$ . Across all sample sizes of 256 or more in Table 6, these ratios are generally close to each other, and the average of these ratios in the validation sample turns out to be 1.00. This implies that confidence intervals for indirect estimates of poverty rates via Kenya’s scorecard and 100% of the national line are—for a given sample size—about the same as the confidence intervals for direct estimates via the 2015/16 KIHBS. This 1.00 appears in Table 7 as the “ $\alpha$  factor for precision” because if  $\alpha = 1.00$ , then the formula for approximate confidence intervals  $\pm c$  for the scorecard is  $\pm c = \pm z \cdot \alpha \cdot \sigma$ .

That is, the formula for the approximate standard error  $\sigma$  for point-in-time estimates of

poverty rates via the scorecard is  $\alpha \cdot \sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}}$ .

In general,  $\alpha$  can be greater than or less than 1.00. When  $\alpha$  is less than 1.00, it means that the scorecard is more precise than direct measurement. It turns out that  $\alpha$  is less than 1.00 for 11 of the 19 poverty lines in Table 7, and its highest value is 1.82.

The formula relating confidence intervals with standard errors for the scorecard can be rearranged to give a formula for determining sample size before estimation. If  $\tilde{p}$  is the expected poverty rate before estimation, then the formula for sample size  $n$  from a population of size  $N$  that is based on the desired confidence level that corresponds to  $z$

and the desired confidence interval  $\pm c$  is  $n = N \cdot \left( \frac{z^2 \cdot \alpha^2 \cdot \tilde{p} \cdot (1 - \tilde{p})}{z^2 \cdot \alpha^2 \cdot \tilde{p} \cdot (1 - \tilde{p}) + c^2 \cdot (N - 1)} \right)$ . If

the population  $N$  is “large” relative to the sample size  $n$ , then the finite-population correction factor  $\phi$  can be taken as one (1), and the formula becomes

$$n = \left( \frac{\alpha \cdot z}{c} \right)^2 \cdot \tilde{p} \cdot (1 - \tilde{p}).$$

To illustrate how to use this, suppose the population  $N$  is 11,414,543 (the number of households in Kenya in 2015/16), suppose  $c = 0.04627$ ,  $z = 1.64$  (90-percent confidence), and the relevant poverty line is 100% of the national line so that the most sensible expected poverty rate  $\tilde{p}$  is Kenya’s overall poverty rate for that line in 2015/16 (27.4 percent at the household level, Table 1). The  $\alpha$  factor is 1.00 (Table 7). Then the sample-size formula gives

$$n = 11,414,543 \cdot \left( \frac{1.64^2 \cdot 1.00^2 \cdot 0.274 \cdot (1 - 0.274)}{1.64^2 \cdot 1.00^2 \cdot 0.274 \cdot (1 - 0.274) + 0.04627^2 \cdot (11,414,543 - 1)} \right) = 250, \text{ which}$$

close to the sample size of 256 observed for these parameters in Table 6 for 100% of the

national line. Taking the finite population correction factor  $\phi$  as one (1) gives the same

$$\text{result, as } n = \left( \frac{1.00 \cdot 1.64}{0.04627} \right)^2 \cdot 0.274 \cdot (1 - 0.274) = 250.^{34}$$

Of course, the  $\alpha$  factors in Table 7 are specific to Kenya, its poverty lines, its poverty rates, and this scorecard. The derivation of the formulas for approximate standard errors using the  $\alpha$  factors, however, is valid for any poverty-assessment tool following the approach in this paper.

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<sup>34</sup> Although USAID has not specified confidence levels nor intervals, IRIS Center (2007a and 2007b) says that a sample size of  $n = 300$  is sufficient for USAID reporting. USAID's microenterprise partners in Kenya should report using the \$1.90/day 2011 PPP line. Given the  $\alpha$  factor of 0.89 for this line (Table 7), an expected before-measurement household-level poverty rate of 22.4 percent (the all-Kenya rate for this line in 2015/16, Table 1), and a confidence level of 90 percent ( $z = 1.64$ ), then  $n = 300$  implies a confidence interval of  $\pm 1.64 \cdot 0.89 \cdot \sqrt{\frac{0.224 \cdot (1 - 0.224)}{300}} = \pm 3.5$  percentage points.

In practice after the end of field work for the KIHBS in August 2016, a program would select a poverty line (say, 100% of the national line), note its participants' population size (for example,  $N = 10,000$  participants), select a desired confidence level (say, 90 percent, or  $z = 1.64$ ), select a desired confidence interval (say,  $\pm 2.0$  percentage points, or  $c = \pm 0.02$ ), make an assumption about  $\tilde{p}$  (perhaps based on a previous estimate such as the household-level poverty rate for 100% of the national line for Kenya of 27.4 percent in the 2015/16 KIHBS in Table 1), look up  $\alpha$  (here, 1.00 in Table 7), assume that the scorecard will still work in the future and for sub-groups that are not nationally representative,<sup>35</sup> and then compute the required sample size. In this

$$\text{illustration, } n = 10,000 \cdot \left( \frac{1.64^2 \cdot 1.00^2 \cdot 0.274 \cdot (1 - 0.274)}{1.64^2 \cdot 1.00^2 \cdot 0.274 \cdot (1 - 0.274) + 0.02^2 \cdot (10,000 - 1)} \right) = 1,180.$$

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<sup>35</sup> This paper reports accuracy for the scorecard applied to its validation sample, but it does not test accuracy for later years nor for sub-populations that are not nationally representative. Performance after August 2016 will resemble that in the 2015/16 KIHBS with deterioration over time and across non-nationally representative sub-groups to the extent that the relationships between indicators and poverty status change.

## 7. Estimates of changes in poverty rates over time

The change in a population's poverty rate between two points in time is estimated as the change in the average poverty likelihood of a sample of households from the population.

The accuracy of estimates of change over time in which both baseline and follow-up estimates are from the new 2015/16 scorecard are not tested here<sup>36</sup>, and this paper can only suggest approximate formulas for standard errors. Nonetheless, the relevant concepts are discussed because in practice pro-poor organizations in Kenya can apply the scorecard to collect their own data and measure change through time.

### 7.1 Warning: *Change is not necessarily impact*

The scorecard can estimate change. Of course, poverty could get better or worse, and the scorecard does not indicate what caused change. This point is often forgotten or confused, so it bears repeating: the scorecard merely estimates change, and it does not, in and of itself, indicate the causes of change. In particular, estimating the impact of participation requires knowledge or assumptions about what would have happened to participants if they had not been participants. Making judgments or drawing conclusions about causality requires either strong assumptions or a control group that resembles participants in all ways except participation. To belabor the point, the

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<sup>36</sup> In particular, the old 2005/6 scorecard cannot be applied with the 2015/16 validation sample nor can the new 2015/16 scorecard be applied with the 2005/6 data because some indicators in the old scorecard are not in the 2015/16 data and because some indicators in the new scorecard are not in the 2005/6 data.

scorecard can help estimate the impact of participation only if there is some way to know—or explicit assumptions about—what would have happened in the absence of participation. And that must come from beyond the scorecard.

## 7.2 Estimating changes in poverty rates

The rest of this section explains how to estimate changes over time.

Consider the illustration begun in the previous section. On 1 January 2019, an organization samples three households who score 20, 30, and 40 and so have poverty likelihoods of 80.4, 64.6, and 48.2 percent (100% of the national line, Table 3). Given the known average error for this line in the validation sample of about +0.2 percentage points, Table 7), the corrected baseline estimated poverty rate is the households' average poverty likelihood of  $[(80.4 + 64.6 + 48.2) \div 3] - (+0.2) = 64.2$  percent.

After baseline, two sampling approaches are possible for the follow-up round:

- *Two independent samples:* Score a new, independent sample from the same population that was sampled from at baseline
- *One sample scored twice:* Score the same sample that was scored at baseline

### 7.2.1 Estimating change with two independent samples

By way of illustration, suppose that three years later on 1 January 2022, the organization draws a new, independent sample of three additional households who are in the same population as the three original households and finds that their scores are 25, 35, and 45 (poverty likelihoods of 80.4, 55.1, and 33.9 percent, 100% of the national line, Table 3). Adjusting for the known average error, the average poverty likelihood at

follow-up is  $[(80.4 + 55.1 + 33.9 \div 3] - (+0.2) = 56.3$  percent. The reduction in the poverty rate is then  $64.2 - 56.3 = 7.9$  percentage points.<sup>37</sup> Supposing that exactly three years passed between the average baseline interview and the average follow-up interview, the estimated annual decrease in the poverty rate is  $7.9 \div 3 = 2.6$  percentage points per year. That is, about one in 38 participants in this hypothetical example cross the poverty line each year.<sup>38</sup> Among those who start below the line, about one in 25 ( $2.6 \div 64.2 = 4.0$  percent) on net end up above the line each year.<sup>39</sup>

### 7.2.2 Estimating change with one sample scored twice

Alternatively, suppose that the same three original households who were scored at baseline are scored again on 1 January 2022. Given scores of 25, 35, and 45, their follow-up poverty likelihoods are 80.4, 55.1, and 33.9 percent. The average across households of the difference in each given household's baseline poverty likelihood and its follow-up poverty likelihood is  $[(80.4 - 80.4) + (64.6 - 55.1) + (48.2 - 33.9)] \div 3 = 7.9$  percentage points.<sup>40</sup> Assuming in this example that there are exactly three years between each household's interviews, the estimated annual decrease in the poverty rate is (again)  $7.9 \div 3 = 2.6$  percentage points per year.

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<sup>37</sup> Of course, such a large reduction in poverty in three years is unlikely, but this is just an example to show how the scorecard can be used to estimate change.

<sup>38</sup> This is a net figure; some start above the line and end below it, and vice versa.

<sup>39</sup> The scorecard does not reveal the reasons for this change.

<sup>40</sup> With one sample scored twice, the error for this line in Table 7 should *not* be subtracted off.

Given the assumptions of the scorecard, both approaches give unbiased estimates of the annual change in poverty rates. In general and in practice, however, they will give different estimates due to differences in the timing of interviews, in the composition of samples, and in the nature of two independent samples (each scored once) versus one sample scored twice (Schreiner, 2014a).

## 7.3 Precision for estimated changes

### 7.3.1 Precision when scoring two independent samples

For two equal-sized independent samples, the same logic as in the previous section can be used to derive a formula relating the confidence interval  $\pm c$  with the standard error  $\sigma$  of a poverty-assessment tool’s estimate of the change in poverty rates over time:

$$\pm c = \pm z \cdot \sigma = \pm z \cdot \alpha \cdot \sqrt{\frac{2 \cdot \hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}}.$$

Here,  $z$ ,  $c$ ,  $\hat{p}$  and  $N$  are defined as above,  $n$  is the sample size at both baseline and follow-up,<sup>41</sup> and  $\alpha$  is the average (across a range of bootstrapped sample sizes) of the ratio of the observed confidence interval from a scorecard divided by the theoretical confidence interval under direct measurement.

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<sup>41</sup> This means that—for a given level of precision—estimating the change in a poverty rate between two points in time requires four times as many interviews (not twice as many) as does estimating a poverty rate at a point in time.



As before, the formula for standard errors can be rearranged to give a formula for sample sizes before indirect estimation via a poverty-assessment tool, where  $\tilde{p}$  is based on previous estimates and is assumed equal at both baseline and follow-up:

$$n = 2 \cdot N \cdot \left( \frac{z^2 \cdot \alpha^2 \cdot \tilde{p} \cdot (1 - \tilde{p})}{z^2 \cdot \alpha^2 \cdot \tilde{p} \cdot (1 - \tilde{p}) + c^2 \cdot (N - 1)} \right). \text{ If } \phi \text{ can be taken as one (1), then the}$$

$$\text{formula becomes } n = 2 \cdot \left( \frac{\alpha \cdot z}{c} \right)^2 \cdot \tilde{p} \cdot (1 - \tilde{p}).$$

With two independent samples,  $\alpha$  has been estimated for 19 countries (Schreiner 2018, 2017a, 2017b, 2017c, 2016b, 2016c, 2016d, 2016e, 2015b, 2015c, 2015d, 2015e, 2013a, 2013b, 2012c, 2010, 2009a, 2009b, and Chen and Schreiner, 2009). The unweighted average of  $\alpha$  across these 19 countries—after averaging  $\alpha$  across poverty lines and pairs of survey rounds within each country—is 1.08. This rough figure is as reasonable as any to use for Kenya (or any other scorecard) from now on.

To illustrate the use of this formula to determine sample size for estimating changes in poverty rates with two independent samples, suppose the desired confidence level is 90 percent ( $z = 1.64$ ), the desired confidence interval is  $\pm 2$  percentage points ( $\pm c = \pm 0.02$ ), the poverty line is 100% of the national line,  $\alpha = 1.08$ ,  $\tilde{p} = 0.274$  (the household-level poverty rate in 2015/16 for 100% of the national line in Table 1), and the population  $N$  is large enough relative to the expected sample size  $n$  that the finite population correction  $\phi$  can be taken as one (1). Then the baseline sample size is

$n = 2 \cdot \left( \frac{1.08 \cdot 1.64}{0.02} \right)^2 \cdot 0.274 \cdot (1 - 0.274) \cdot 1 = 3,121$ , and the follow-up sample size is also 3,121.

### 7.3.2 Precision with one sample scored twice

Analogous to previous derivations, the general formula relating the confidence interval  $\pm c$  to the standard error  $\sigma$  when using a scorecard to estimate change for one sample scored twice is:<sup>42</sup>

$$\pm c = \pm z \cdot \sigma = \pm z \cdot \alpha \cdot \sqrt{\frac{\hat{p}_{12} \cdot (1 - \hat{p}_{12}) + \hat{p}_{21} \cdot (1 - \hat{p}_{21}) + 2 \cdot \hat{p}_{12} \cdot \hat{p}_{21}}{n}} \cdot \sqrt{\frac{N - n}{n - 1}},$$

where  $z$ ,  $c$ ,  $\alpha$ ,  $N$ , and  $n$  are defined as usual,  $\hat{p}_{12}$  is the share of all sampled households that move from below the poverty line to above it, and  $\hat{p}_{21}$  is the share of all sampled households that move from above the line to below it.

The formula for confidence intervals can be re-arranged to give a formula for sample size before estimation. This requires an estimate (based on information available before estimation) of the expected shares of all households who will cross the poverty line  $\tilde{p}_{12}$  and  $\tilde{p}_{21}$ . Before estimation, an agnostic assumption is that the change in the poverty rate will be zero, which implies  $\tilde{p}_{12} = \tilde{p}_{21} = \tilde{p}_*$ , giving:

$$n = 2 \cdot \left( \frac{\alpha \cdot z}{c} \right)^2 \cdot \tilde{p}_* \cdot \sqrt{\frac{N - n}{n - 1}}.$$

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<sup>42</sup> See McNemar (1947) and Johnson (2007). John Pezzullo helped find this formula.

Because  $\tilde{p}_*$  could be anything between 0 and 0.5, more information is needed to apply this formula. The average observed relationship in Niger (Schreiner, 2018) and Peru (Schreiner, 2009c) between  $\tilde{p}_*$ , the number of years  $y$  between baseline and follow-up, and  $p_{\text{pre-baseline}} \cdot (1 - p_{\text{pre-baseline}})$  is close to:

$$\tilde{p}_* = -0.01 + 0.016 \cdot y + 0.56 \cdot [p_{\text{pre-baseline}} \cdot (1 - p_{\text{pre-baseline}})].$$

Given this approximate result, a sample-size formula for a sample of households to whom the Kenya scorecard is applied twice (once after August 2016 and then again later) is

$$n = 2 \cdot \left( \frac{\alpha \cdot z}{c} \right)^2 \cdot [-0.01 + 0.016 \cdot y + 0.56 \cdot p_{\text{pre-baseline}} \cdot (1 - p_{\text{pre-baseline}})] \cdot \sqrt{\frac{N - n}{n - 1}}.$$

The average  $\alpha$  across poverty lines for Niger and Peru is about 1.14. This 1.14 figure for  $\alpha$  is as reasonable as any other for the Kenya scorecard here (as well as for other scorecards in general).

To illustrate the use of this formula, suppose the desired confidence level is 90 percent ( $z = 1.64$ ), the desired confidence interval is  $\pm 2.0$  percentage points ( $\pm c = \pm 0.02$ ), the poverty line is 100% of the national line, the sample will first be scored in 2019 and then again in 2022 ( $y = 3$ ), and the population  $N$  is so large relative to the expected sample size  $n$  that the finite population correction  $\phi$  can be taken as one (1). The pre-baseline household-level poverty rate  $p_{2019}$  is taken as 27.4 percent (Table 1), and  $\alpha$  is assumed to be 1.14. Then the baseline sample size is

$$n = 2 \cdot \left( \frac{1.14 \cdot 1.64}{0.02} \right)^2 \cdot \{-0.01 + 0.016 \cdot 3 + [0.56 \cdot 0.274 \cdot (1 - 0.274)]\} \cdot 1 = 2,612. \text{ The same}$$

group of 2,612 households is scored at follow-up as well.

## 8. Targeting

When a program uses the scorecard for segmenting clients for differentiated treatment (*targeting*), households with scores at or below a cut-off are labeled *targeted* and given one type of treatment by the program. Households with scores above a cut-off are labeled *non-targeted* and given another type of treatment.

There is a distinction between *targeting status* (having a score at or below a targeting cut-off) and *poverty status* (having consumption below a poverty line). Poverty status is a fact that is defined by whether consumption is below a poverty line as directly measured by a survey. In contrast, targeting status is a program's policy choice that depends on a cut-off and on an indirect estimate from a poverty-assessment tool.

Households that score at or below a given cut-off should be labeled as *targeted*,<sup>43</sup> not as *poor*. After all, unless all targeted households have poverty likelihoods of 100 percent, it is possible that at least some of them are non-poor (their consumption is above a given poverty line). In the context of the scorecard, the terms *poor* and *non-poor* have specific definitions. Using these same terms for targeting status is incorrect and misleading.

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<sup>43</sup> Other labels are meaningful as long as they describe the segment and do not confuse targeting status (having a score below a program-selected cut-off) with poverty status (having consumption below an externally-defined poverty line). Examples include: *Groups A, B, and C; Households with scores of 29 or less, 30 to 69, or 70 or more; and Households that qualify for reduced fees, or that do not qualify.*

Targeting is successful to the extent that households truly below a poverty line are targeted (*inclusion*) or households truly above a poverty line are not targeted (*exclusion*). Of course, no poverty-assessment tool is perfect, and targeting is unsuccessful to the extent that households truly below a poverty line are not targeted (*undercoverage*) or households truly above a poverty line are targeted (*leakage*).

Table 8 depicts these four possible targeting outcomes. Targeting accuracy varies by the cut-off score. A higher cut-off has better inclusion and better undercoverage (but worse exclusion and worse leakage), while a lower cut-off has better exclusion and better leakage (but worse inclusion and worse undercoverage).

Programs should weigh these trade-offs when setting a cut-off. A formal way to do this is to assign net benefits—based on a program’s values and mission—to each of the four possible targeting outcomes and then to choose the cut-off that maximizes the sum of net benefits (Adams and Hand, 2000; Hoadley and Oliver, 1998).

Table 9 shows the distribution of households by targeting outcome for Kenya. For an example cut-off of 44 or less, outcomes for 100% of the national line in the validation sample are:

- Inclusion: 16.7 percent are below the line and correctly targeted
- Undercoverage: 10.8 percent are below the line and mistakenly not targeted
- Leakage: 13.2 percent are above the line and mistakenly targeted
- Exclusion: 59.4 percent are above the line and correctly not targeted

Increasing the cut-off to 47 or less improves inclusion and undercoverage but worsens leakage and exclusion:

- Inclusion: 19.1 percent are below the line and correctly targeted
- Undercoverage: 8.4 percent are below the line and mistakenly not targeted
- Leakage: 16.6 percent are above the line and mistakenly targeted
- Exclusion: 55.9 percent are above the line and correctly not targeted

Which cut-off is preferred depends on the sum of net benefits. If each targeting outcome has a per-household benefit or cost, then total net benefit for a given cut-off is:

Benefit per household correctly included	x	Households correctly included	–
Cost per household mistakenly not covered	x	Households mistakenly not covered	–
Cost per household mistakenly leaked	x	Households mistakenly leaked	+
Benefit per household correctly excluded	x	Households correctly excluded.	

To set an optimal cut-off, a program would:

- Assign benefits and costs to possible outcomes, based on its values and mission
- Tally total net benefits for each cut-off using Table 9 for a chosen poverty line
- Select the cut-off with the highest total net benefit

The most difficult step is assigning benefits and costs to targeting outcomes. A program that uses targeting—with or without the scorecard—should thoughtfully consider how it values successful inclusion and exclusion versus errors of undercoverage and leakage. It is healthy to go through a process of thinking explicitly and intentionally about how possible targeting outcomes are valued.

A common choice of benefits and costs is the “hit rate”, where total net benefit is the number of households correctly included or correctly excluded:

Hit rate =	1	x	Households correctly included	–
	0	x	Households mistakenly undercovered	–
	0	x	Households mistakenly leaked	+
	1	x	Households correctly excluded.	

Table 9 shows the hit rate for all cut-offs for the scorecard. For the example of 100% of the national line in the validation sample, total net benefit under the hit rate is highest (76.9) for a cut-off of 41 or less, with about three in four households in Kenya correctly classified.

The hit rate weighs successful inclusion of households below the poverty line the same as successful exclusion of households above the line. If a program values inclusion more (say, twice as much) than exclusion, then it can reflect this by setting the benefit for inclusion to 2 and the benefit for exclusion to 1. Then the chosen cut-off will maximize  $(2 \times \text{Households correctly included}) + (1 \times \text{Households correctly excluded})$ .<sup>44</sup>

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<sup>44</sup> Table 9 also reports BPAC, the Balanced Poverty Accuracy Criterion adopted by USAID for certifying poverty-assessment tools for use by its microenterprise partners. IRIS Center (2005) made BPAC to consider accuracy in terms of the errors in estimated poverty rates and in terms of targeting inclusion.  $BPAC = (\text{Inclusion} - |\text{Undercoverage} - \text{Leakage}|) \times [100 \div (\text{Inclusion} + \text{Undercoverage})]$ . Schreiner (2014b) explains why BPAC does not add information over-and-above that provided by the more-standard, more-disaggregated measures used here.



As an alternative to assigning benefits and costs to targeting outcomes and then choosing a cut-off to maximize total net benefits, a program could set a cut-off to achieve a desired poverty rate among targeted households. The third column of Table 10 (“% targeted HHs who are poor”) shows, for the scorecard applied to the validation sample, the estimated poverty rate among households who score at or below a given cut-off. For the example of 100% of the national line, targeting households who score 44 or less would target 29.9 percent of all households (second column) and would be associated with an estimated poverty rate among those targeted of 55.8 percent (third column).

Table 10 also reports two other measures of targeting accuracy. The first is a version of coverage (“% poor HHs who are targeted”). For the example of 100% of the national line with the validation sample and a cut-off of 44 or less, 60.7 percent of all poor households are covered.

The final targeting measure in Table 10 is the number of successfully targeted poor households for each non-poor household mistakenly targeted (right-most column). For 100% of the national line with the validation sample and a cut-off of 44 or less, covering about 1.3 poor households means leaking to 1 non-poor household.

## 9. Summary

The scorecard helps pro-poor programs in Kenya to get to know their participants better so as to prove and improve their social performance. It can segment clients for differentiated treatment as well as estimate:

- The likelihood that a household has consumption below a given poverty line
- The poverty rate of a population at a point in time
- The change in the poverty rate of a population

The scorecard is inexpensive to use and can be understood by non-specialists. It is designed to be practical for pro-poor programs in Kenya that want to improve how they monitor and manage their social performance.

The scorecard is constructed with data from about three-fifths of the households in Kenya's 2015/16 KIHBS. Those households' scores are then calibrated to poverty likelihoods for 19 poverty lines. The scorecard's accuracy (errors and standard errors) is tested out-of-sample on data that is not used in scorecard construction.

When the scorecard is applied to the 19 poverty lines in the validation sample, the maximum of the absolute values of the average error for point-in-time estimates of poverty rates is 7.0 percentage points, and the average of the absolute values of the average error across the 19 lines is about 2.9 percentage points. Corrected estimates may be found by subtracting the known error for a given poverty line from original, uncorrected estimates.

For  $n = 16,384$  and 90-percent confidence, the precision of point-in-time estimates of poverty rates is  $\pm 0.8$  percentage points or better. With  $n = 1,024$ , the 90-percent confidence intervals are  $\pm 3.0$  percentage points or better.

If an organization wants to use the scorecard for segmenting clients for differentiated treatment, then this paper provides useful information for selecting the targeting cut-off that best fits its values and mission.

Although the statistical technique is innovative, and although technical accuracy is important, the design of the scorecard focuses on low-cost, transparency, and ease-of-use. After all, accuracy is irrelevant if an organization's managers feel so daunted by a tool's complexity or its cost that they do not even try to use it.

For this reason, the scorecard uses 10 indicators that are straightforward, low-cost, and verifiable. Points are all zeros or positive integers, and scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). Scores are converted to poverty likelihoods via look-up tables, and targeting cut-offs are likewise straightforward to apply. The design attempts to facilitate voluntary adoption by helping program managers to understand and to trust the scorecard and by allowing non-specialists to add up scores quickly in the field.

In summary, the scorecard is a low-cost, practical, objective, transparent way for pro-poor programs in Kenya to estimate consumption-based poverty rates, track changes in poverty rates over time, and segment participants for differentiated treatment. A scorecard can be made for any country with similar data.

## References

- Adams, Niall M.; and David J. Hand. (2000) “Improving the Practice of Classifier Performance Assessment”, *Neural Computation*, Vol. 12, pp. 305–311.
- Baesens, Bart; Van Gestel, Tony; Viaene, Stijn; Stepanova, Maria; Suykens, Johan A.K.; and Jan Vanthienen. (2003) “Benchmarking State-of-the-Art Classification Algorithms for Credit Scoring”, *Journal of the Operational Research Society*, Vol. 54, pp. 627–635.
- Brown, Caitlin; Ravallion, Martin; and Dominique van de Walle. (2016) “A Poor Means Test? Econometric Targeting in Africa”, World Bank Policy Research Working Paper No. 7915, [documents.worldbank.org/curated/en/484991481639919564/pdf/WPS7915.pdf](https://documents.worldbank.org/curated/en/484991481639919564/pdf/WPS7915.pdf), retrieved 25 June 2018.
- Caire, Dean. (2004) “Building Credit Scorecards for Small-Business Lending in Developing Markets”, [microfinance.com/English/Papers/Scoring\\_SMEs\\_Hybrid.pdf](https://microfinance.com/English/Papers/Scoring_SMEs_Hybrid.pdf), retrieved 25 June 2018.
- ; and Mark Schreiner. (2012) “Cross-Tab Weighting for Credit Scorecards in Developing Markets”, [microfinance.com/English/Papers/Cross\\_Tab\\_Weights\\_for\\_Scoring.pdf](https://microfinance.com/English/Papers/Cross_Tab_Weights_for_Scoring.pdf), retrieved 25 June 2018.
- Camacho, Adriana; and Emily Conover. (2011) “Manipulation of Social-Program Eligibility”, *American Economic Journal: Economic Policy*, Vol. 3, No. 2, pp. 41–65.
- Chen, Shiyuan; and Mark Schreiner. (2009) “Scorocs Simple Poverty Scorecard Tool: Vietnam”, [SimplePovertyScorecard.com/VNM\\_2006\\_ENG.pdf](https://SimplePovertyScorecard.com/VNM_2006_ENG.pdf), retrieved 25 June 2018.
- Coady, David; Grosh, Margaret; and John Hoddinott. (2004) *Targeting of Transfers in Developing Countries*, [hdl.handle.net/10986/14902](https://hdl.handle.net/10986/14902), retrieved 25 June 2018.
- Cochran, William G. (1977) *Sampling Techniques, Third Edition*.
- Dawes, Robyn M. (1979) “The Robust Beauty of Improper Linear Models in Decision Making”, *American Psychologist*, Vol. 34, No. 7, pp. 571–582.
- Deaton, Angus; and Salman Zaidi. (2002) “Guidelines for Constructing Consumption Aggregates for Welfare Analysis”, World Bank LSMS Working Paper No. 135, [hdl.handle.net/10986/14101](https://hdl.handle.net/10986/14101), retrieved 25 June 2018.

- Diamond, Alexis; Gill, Michael; Rebolledo Dellepiane, Miguel Angel; Skoufias, Emmanuel; Vinha, Katja; and Yiqing Xu. (2016) “Estimating Poverty Rates in Target Populations: An Assessment of the Simple Poverty Scorecard Poverty-Assessment Tool and Alternative Approaches”, World Bank Policy Research Working Paper No. 7793, [hdl.handle.net/10986/25038](https://hdl.handle.net/10986/25038), retrieved 25 June 2018.
- Friedman, Jerome H. (1997) “On Bias, Variance, 0–1 Loss, and the Curse-of-Dimensionality”, *Data Mining and Knowledge Discovery*, Vol. 1, pp. 55–77.
- Fuller, Rob. (2006) “Measuring the Poverty of Microfinance Clients in Haiti”, [microfinance.com/English/Papers/Scoring\\_Poverty\\_Haiti\\_Fuller.pdf](http://microfinance.com/English/Papers/Scoring_Poverty_Haiti_Fuller.pdf), retrieved 25 June 2018.
- Goodman, Leo A.; and Kruskal, William H. (1979) *Measures of Association for Cross Classification*.
- Grosh, Margaret; and Judy L. Baker. (1995) “Proxy-Means Tests for Targeting Social Programs: Simulations and Speculation”, World Bank LSMS Working Paper No. 118, [go.worldbank.org/W90WN57PDO](http://go.worldbank.org/W90WN57PDO), retrieved 25 June 2018.
- Hand, David J. (2006) “Classifier Technology and the Illusion of Progress”, *Statistical Science*, Vol. 22, No. 1, pp. 1–15.
- Haslett, Stephen. (2012) “Practical Guidelines for the Design and Analysis of Sample Surveys for Small-Area Estimation”, *Journal of the Indian Society of Agricultural Statistics*, Vol. 66, No. 1, pp. 203–212.
- Hoadley, Bruce; and Robert M. Oliver. (1998) “Business Measures of Scorecard Benefit”, *IMA Journal of Mathematics Applied in Business and Industry*, Vol. 9, pp. 55–64.
- IRIS Center. (2007a) “Manual for the Implementation of USAID Poverty-Assessment Tools”, [povertytools.org/training\\_documents/Manuals/USAID\\_PAT\\_Manual\\_Eng.pdf](http://povertytools.org/training_documents/Manuals/USAID_PAT_Manual_Eng.pdf), retrieved 25 June 2018.
- (2007b) “Introduction to Sampling for the Implementation of PATs”, [povertytools.org/training\\_documents/Sampling/Introduction\\_Sampling.pdf](http://povertytools.org/training_documents/Sampling/Introduction_Sampling.pdf), retrieved 25 June 2018.
- (2005) “Notes on Assessment and Improvement of Tool Accuracy”, [povertytools.org/other\\_documents/AssessingImproving\\_Accuracy.pdf](http://povertytools.org/other_documents/AssessingImproving_Accuracy.pdf), retrieved 25 June 2018.

- Johnson, Glenn. (2007) “Lesson 3: Two-Way Tables—Dependent Samples”, [onlinecourses.science.psu.edu/stat504/node/96](http://onlinecourses.science.psu.edu/stat504/node/96), retrieved 25 June 2018.
- Jolliffe, Dean; and Espen Beer Prydz. (2016) “Estimating International Poverty Lines from Comparable National Thresholds”, *Journal of Economic Inequality*, Vol. 14, pp. 185–198.
- Kenya National Bureau of Statistics. (2018) “Basic Report on Well-Being in Kenya (Based on the 2015/16 Kenya Integrated Household Budget Survey)”, [knbs.or.ke/launch-201516-kenya-integrated-household-budget-survey-kihbs-reports-2/](http://knbs.or.ke/launch-201516-kenya-integrated-household-budget-survey-kihbs-reports-2/), retrieved 25 June 2018.
- (2007) “Basic Report on Well-Being in Kenya (Based on the 2005/6 Kenya Integrated Household Budget Survey)”, [statistics.knbs.or.ke/nada/index.php/catalog/8/download/35](http://statistics.knbs.or.ke/nada/index.php/catalog/8/download/35), retrieved 25 June 2018.
- Kolesar, Peter; and Janet L. Showers. (1985) “A Robust Credit-Screening Model Using Categorical Data”, *Management Science*, Vol. 31, No. 2, pp. 124–133.
- Lovie, Alexander D.; and Patricia Lovie. (1986) “The Flat-Maximum Effect and Linear Scoring Models for Prediction”, *Journal of Forecasting*, Vol. 5, pp. 159–168.
- Martinelli, César; and Susan W. Parker. (2007) “Deception and Misreporting in a Social Program”, *Journal of the European Economic Association*, Vol. 4, No. 6, pp. 886–908.
- Matul, Michal; and Sean Kline. (2003) “Scoring Change: Prizma’s Approach to Assessing Poverty”, Microfinance Centre for Central and Eastern Europe and the New Independent States Spotlight Note No. 4, [mfc.org.pl/wp-content/uploads/2016/04/spotlight4.pdf](http://mfc.org.pl/wp-content/uploads/2016/04/spotlight4.pdf), retrieved 25 June 2018.
- McNemar, Quinn. (1947) “Note on the Sampling Error of the Difference between Correlated Proportions or Percentages”, *Psychometrika*, Vol. 17, pp. 153–157.
- Myers, James H.; and Edward W. Forgy. (1963) “The Development of Numerical Credit-Evaluation Systems”, *Journal of the American Statistical Association*, Vol. 58, No. 303, pp. 779–806.
- Narayan, Ambar; and Nobuo Yoshida. (2005) “Proxy-Means Tests for Targeting Welfare Benefits in Sri Lanka”, World Bank Report No. SASPR–7, [documents.worldbank.org/curated/en/2005/07/6209268/proxy-means-test-targeting-welfare-benefits-sri-lanka](http://documents.worldbank.org/curated/en/2005/07/6209268/proxy-means-test-targeting-welfare-benefits-sri-lanka), retrieved 25 June 2018.

- Onwujekwe, Obinna; Hanson, Kara; and Julia Fox-Rushby. (2006) “Some Indicators of Socio-Economic Status May Not Be Reliable and Use of Indexes with These Data Could Worsen Equity”, *Health Economics*, Vol. 15, pp. 639–644.
- Pradhan, Menno; Suryahadi, Asep; Sumarto, Sudarno; and Lant Pritchett. (2001) “Eating Like which ‘Joneses’? An Iterative Solution to the Choice of a Poverty Line ‘Reference Group’”, *Review of Income and Wealth*, Series 47, No. 4, pp. 473–487.
- Ravallion, Martin. (1998) “Poverty Lines in Theory and Practice”, World Bank LSMS Working Paper No. 133, [go.worldbank.org/8P3IBJPQS1](http://go.worldbank.org/8P3IBJPQS1), retrieved 25 June 2018.
- Rutstein, Shea Oscar; and Kiersten Johnson. (2004) “The DHS Wealth Index”, DHS Comparative Reports No. 6, [measuredhs.com/pubs/pdf/CR6/CR6.pdf](http://measuredhs.com/pubs/pdf/CR6/CR6.pdf), retrieved 25 June 2018.
- SAS Institute Inc. (2004) “The LOGISTIC Procedure: Rank Correlation of Observed Responses and Predicted Probabilities”, *SAS/STAT User’s Guide, Version 9*, [support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#statug\\_logistic\\_sect035.htm](http://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#statug_logistic_sect035.htm), retrieved 25 June 2018.
- Schreiner, Mark. (2018) “Scorocs Simple Poverty Scorecard Tool: Niger”, [SimplePovertyScorecard.com/NER\\_2014\\_ENG.pdf](http://SimplePovertyScorecard.com/NER_2014_ENG.pdf), retrieved 25 June 2018.
- (2017a) “Scorocs Simple Poverty Scorecard Tool: Zambia”, [SimplePovertyScorecard.com/ZMB\\_2015\\_ENG.pdf](http://SimplePovertyScorecard.com/ZMB_2015_ENG.pdf), retrieved 25 June 2018.
- (2017b) “Scorocs Simple Poverty Scorecard Tool: Mexico”, [SimplePovertyScorecard.com/MEX\\_2014\\_ENG.pdf](http://SimplePovertyScorecard.com/MEX_2014_ENG.pdf), retrieved 25 June 2018.
- (2017c) “Scorocs Simple Poverty Scorecard Tool: El Salvador”, [SimplePovertyScorecard.com/SLV\\_2014\\_ENG.pdf](http://SimplePovertyScorecard.com/SLV_2014_ENG.pdf), retrieved 25 June 2018.
- (2016a) “Popular Science”, [microfinance.com/English/Papers/Popular\\_Science\\_Schreiner.mp4](http://microfinance.com/English/Papers/Popular_Science_Schreiner.mp4), retrieved 25 June 2018.
- (2016b) “Scorocs Simple Poverty Scorecard Tool: Guatemala”, [SimplePovertyScorecard.com/GTM\\_2014\\_ENG.pdf](http://SimplePovertyScorecard.com/GTM_2014_ENG.pdf), retrieved 25 June 2018.
- (2016c) “Scorocs Simple Poverty Scorecard Tool: India”, [SimplePovertyScorecard.com/IND\\_2011\\_ENG.pdf](http://SimplePovertyScorecard.com/IND_2011_ENG.pdf), retrieved 25 June 2018.

- (2016d) “Scorocs Simple Poverty Scorecard Tool: Sri Lanka”,  
[SimplePovertyScorecard.com/LKA\\_2012\\_ENG.pdf](http://SimplePovertyScorecard.com/LKA_2012_ENG.pdf), retrieved 25 June 2018.
- (2016e) “Scorocs Simple Poverty Scorecard Tool: Cameroon”,  
[SimplePovertyScorecard.com/CMR\\_2014\\_ENG.pdf](http://SimplePovertyScorecard.com/CMR_2014_ENG.pdf), retrieved 25 June 2018.
- (2015a) “There’s No Place Like Home? How the Interview Method Affects Results with the Progress out of Poverty Index<sup>®</sup>”, [microfinance.com/English/Papers/Scoring\\_Poverty\\_Interview\\_Method\\_Effects\\_EN.pdf](http://microfinance.com/English/Papers/Scoring_Poverty_Interview_Method_Effects_EN.pdf), retrieved 25 June 2018.
- (2015b) “Scorocs Simple Poverty Scorecard Tool: Ghana”,  
[SimplePovertyScorecard.com/GHA\\_2012\\_ENG.pdf](http://SimplePovertyScorecard.com/GHA_2012_ENG.pdf), retrieved 25 June 2018.
- (2015c) “Scorocs Simple Poverty Scorecard Tool: Bolivia”,  
[SimplePovertyScorecard.com/BOL\\_2013\\_ENG.pdf](http://SimplePovertyScorecard.com/BOL_2013_ENG.pdf), retrieved 25 June 2018.
- (2015d) “Scorocs Simple Poverty Scorecard Tool: Malawi”,  
[SimplePovertyScorecard.com/MWI\\_2010\\_ENG.pdf](http://SimplePovertyScorecard.com/MWI_2010_ENG.pdf), retrieved 25 June 2018.
- (2015e) “Scorocs Simple Poverty Scorecard Tool: Cambodia”,  
[SimplePovertyScorecard.com/KHM\\_2011\\_ENG.pdf](http://SimplePovertyScorecard.com/KHM_2011_ENG.pdf), retrieved 25 June 2018.
- (2014a) “The Process of Poverty-Scoring Analysis”,  
[SimplePovertyScorecard.com/Process\\_Poverty\\_Scoring\\_Analysis.pdf](http://SimplePovertyScorecard.com/Process_Poverty_Scoring_Analysis.pdf),  
retrieved 25 June 2018.
- (2014b) “How Do the Simple Poverty Scorecard and the PAT Differ?”,  
[microfinance.com/English/Papers/Scorecard\\_versus\\_PAT.pdf](http://microfinance.com/English/Papers/Scorecard_versus_PAT.pdf), retrieved 25 June 2018.
- (2013a) “Scorocs Simple Poverty Scorecard Tool: Bangladesh”,  
[SimplePovertyScorecard.com/BGD\\_2010\\_ENG.pdf](http://SimplePovertyScorecard.com/BGD_2010_ENG.pdf), retrieved 25 June 2018.
- (2013b) “Scorocs Simple Poverty Scorecard Tool: Nicaragua”,  
[SimplePovertyScorecard.com/NIC\\_2009\\_ENG.pdf](http://SimplePovertyScorecard.com/NIC_2009_ENG.pdf), retrieved 25 June 2018.
- (2012a) “An Expert-Based Poverty Scorecard for Rural China”,  
[microfinance.com/English/Papers/Scoring\\_Poverty\\_China\\_EN.pdf](http://microfinance.com/English/Papers/Scoring_Poverty_China_EN.pdf), retrieved 25 June 2018.



- (2012b) “Scorocs Simple Poverty Scorecard Tool: Colombia”,  
[SimplePovertyScorecard.com/COL\\_2009\\_ENG.pdf](http://SimplePovertyScorecard.com/COL_2009_ENG.pdf), retrieved 25 June 2018.
- (2012c) “Scorocs Simple Poverty Scorecard Tool: Peru”,  
[SimplePovertyScorecard.com/PER\\_2010\\_ENG.pdf](http://SimplePovertyScorecard.com/PER_2010_ENG.pdf), retrieved 25 June 2018.
- (2011) “Scorocs Simple Poverty Scorecard Tool: Kenya”,  
[SimplePovertyScorecard.com/KEN\\_2005\\_ENG.pdf](http://SimplePovertyScorecard.com/KEN_2005_ENG.pdf), retrieved 25 June 2018.
- (2010) “Scorocs Simple Poverty Scorecard Tool: Honduras”,  
[SimplePovertyScorecard.com/HND\\_2007\\_ENG.pdf](http://SimplePovertyScorecard.com/HND_2007_ENG.pdf), retrieved 25 June 2018.
- (2009a) “Scorocs Simple Poverty Scorecard Tool: Philippines”,  
[SimplePovertyScorecard.com/PHL\\_2004\\_ENG.pdf](http://SimplePovertyScorecard.com/PHL_2004_ENG.pdf), retrieved 25 June 2018.
- (2009b) “Scorocs Simple Poverty Scorecard Tool: Pakistan”,  
[SimplePovertyScorecard.com/PAK\\_2005\\_ENG.pdf](http://SimplePovertyScorecard.com/PAK_2005_ENG.pdf), retrieved 25 June 2018.
- (2009c) “Scorocs Simple Poverty Scorecard Tool: Peru”,  
[SimplePovertyScorecard.com/PER\\_2007\\_ENG.pdf](http://SimplePovertyScorecard.com/PER_2007_ENG.pdf), retrieved 25 June 2018.
- (2008) “Scorocs Simple Poverty Scorecard Tool: Peru”,  
[SimplePovertyScorecard.com/PER\\_2003\\_ENG.pdf](http://SimplePovertyScorecard.com/PER_2003_ENG.pdf), retrieved 25 June 2018.
- (2006) “Is One Simple Poverty Scorecard Enough for India?”,  
[microfinance.com/English/Papers/Scoring\\_Poverty\\_India\\_Segments.pdf](http://microfinance.com/English/Papers/Scoring_Poverty_India_Segments.pdf),  
retrieved 25 June 2018.
- (2005a) “La Herramienta del Índice de Calificación de la Pobreza™ de Scorocs™:  
México”, [SimplePovertyScorecard.com/MEX\\_2002\\_SPA.pdf](http://SimplePovertyScorecard.com/MEX_2002_SPA.pdf), retrieved 25 June  
2018.
- (2005b) “IRIS Questions on the Simple Poverty Scorecard”,  
[microfinance.com/English/Papers/Scoring\\_Poverty\\_Response\\_to\\_IRIS.pdf](http://microfinance.com/English/Papers/Scoring_Poverty_Response_to_IRIS.pdf),  
retrieved 25 June 2018.
- (2002) *Scoring: The Next Breakthrough in Microfinance?* CGAP Occasional Paper  
No. 7, [microfinance.com/English/Papers/Scoring\\_Breakthrough\\_CGAP.pdf](http://microfinance.com/English/Papers/Scoring_Breakthrough_CGAP.pdf),  
retrieved 25 June 2018.

- ; Matul, Michal; Pawlak, Ewa; and Sean Kline. (2014) “Poverty Scoring: Lessons from a Microlender in Bosnia-Herzegovina”, *Poverty and Public Policy*, Vol. 6, No. 4, pp. 407–428.
- Sharif, Iffath Anwar. (2009) “Building a Targeting System for Bangladesh Based on Proxy-Means Testing”, World Bank Social Protection Discussion Paper No. 0914, [siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Safety-Nets-DP/0914.pdf](http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Safety-Nets-DP/0914.pdf), retrieved 25 June 2018.
- Stillwell, William G.; Barron, F. Hutton; and Ward Edwards. (1983) “Evaluating Credit Applications: A Validation of Multi-Attribute Utility-Weight Elicitation Techniques”, *Organizational Behavior and Human Performance*, Vol. 32, pp. 87–108.
- Tarozzi, Alessandro; and Angus Deaton. (2009) “Using Census and Survey Data to Estimate Poverty and Inequality for Small Areas”, *Review of Economics and Statistics*, Vol. 91, No. 4, pp. 773–792.
- Toohig, Jeff. (2008) “PPI Pilot Training Guide”, [microfinancegateway.org/sites/default/files/mfg-en-paper-progress-out-of-poverty-index-ppi-pilot-training-mar-2008.pdf](http://microfinancegateway.org/sites/default/files/mfg-en-paper-progress-out-of-poverty-index-ppi-pilot-training-mar-2008.pdf), retrieved 25 June 2018.
- United States Congress. (2004) “Microenterprise Results and Accountability Act of 2004 (HR 3818 RDS)”, November 20, [smith4nj.com/laws/108-484.pdf](http://smith4nj.com/laws/108-484.pdf), retrieved 25 June 2018.
- Wainer, Howard. (1976) “Estimating Coefficients in Linear Models: It Don’t Make No Nevermind”, *Psychological Bulletin*, Vol. 83, pp. 223–227.
- World Bank. (2013) “Shared Prosperity: A New Goal for a Changing World”, [worldbank.org/en/news/feature/2013/05/08/shared-prosperity-goal-for-changing-world](http://worldbank.org/en/news/feature/2013/05/08/shared-prosperity-goal-for-changing-world), retrieved 25 June 2018.
- (2012) *Targeting Poor and Vulnerable Households in Indonesia*, [documents.worldbank.org/curated/en/2012/01/15879773/targeting-poor-vulnerable-households-indonesia](http://documents.worldbank.org/curated/en/2012/01/15879773/targeting-poor-vulnerable-households-indonesia), retrieved 25 June 2018.
- (2008) “International Comparison Project: Tables of Results”, [siteresources.worldbank.org/ICPINT/Resources/icp-final-tables.pdf](http://siteresources.worldbank.org/ICPINT/Resources/icp-final-tables.pdf), retrieved 25 June 2018.
- Zeller, Manfred. (2004) “Review of Poverty Assessment Tools”, [povertytools.org/other\\_documents/Review%20of%20PAT%20Tools.pdf](http://povertytools.org/other_documents/Review%20of%20PAT%20Tools.pdf), retrieved 25 June 2018.

## Interview Guide

The excerpts quoted here are from:

Kenya National Bureau of Statistics. (2015) “Interview Manual: Kenya Integrated Household Budget Survey (KIHBS) 2015/16” [the *Manual*].

### **Basic interview instructions**

Fill out the scorecard header and the “Back-page Worksheet” first, following the directions on the “Back-page Worksheet”.

In the scorecard header, fill in the number of household members based on the list you made as part of the “Back-page Worksheet”.

Do not directly ask the first scorecard indicator (“How many household members are there?”). Instead, fill in the appropriate answer based on the number of household members that you listed on the “Back-page Worksheet”.

Do not directly ask the second scorecard indicator (“How many household members have a mobile phone?”). Instead, fill in the appropriate answer based on the number of household members who have a mobile phone according to what you have recorded on the “Back-page Worksheet”.

Do not directly ask the third scorecard indicator (“Do any household members have a disability that gives them difficulties in engaging in an economic activity?”). Instead, fill in the appropriate answer based whether you recorded any household members as being economically disabled on the “Back-page Worksheet”.

Do not directly ask the fourth scorecard indicator (“In the last 7 days, did any household members work at least one hour on their own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on?”). Instead, fill in the appropriate answer based whether you recorded any household members as being self-employed (or business owners) in a non-agricultural activity on the “Back-page Worksheet”.

Do not directly ask the fifth scorecard indicator (“In the last 7 days, were any household members casual workers in their main/primary job?”). Instead, fill in the appropriate answer based whether you recorded any household members as casual workers on the “Back-page Worksheet”.

Ask all of the remaining scorecard questions directly of the respondent.

## General interviewing advice

Study this “Guide” carefully, and carry it with you while you work. Follow the instructions in this “Guide” (including this one).

Remember that the respondent for the interview need not be the same person as the household member who is a participant with your organization. Likewise, the “field agent” to be recorded in the scorecard header is not necessarily the same as you the enumerator who is doing the interview. Rather, the “field agent” is the employee of the pro-poor program with whom the participant has an on-going relationship. If the program does not have such a field agent, then the relevant spaces in the scorecard header should be left blank.

Read each question word-for-word, in the order presented in the scorecard. Do not read the response options aloud.

When you mark a response to a scorecard indicator, circle the spelled-out response option and its point value, and write the point value in the “Score” column, like this:

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6. Can the male head/spouse read and write in any language?	A. No	0	
	B. No male head/spouse	2	2
	C. Yes	3	

---

To help to reduce errors, you should circle the response option, the points printed on the scorecard, and the hand-written points that correspond to the response.

When an issue comes up that is not addressed here, its resolution should be left to the unaided judgment of the enumerator, as that apparently was the practice of the KNBS in the 2015/16 KIHBS. That is, an organization using the scorecard should not promulgate any definitions or rules (other than those in this “Guide”) to be used by all its enumerators. Anything not explicitly addressed in this “Guide” is to be left to the unaided judgment of each individual enumerator.

Do not read the response options to the respondent. Simply read the question, and then stop; wait for a response. If the respondent asks for clarification or otherwise hesitates or seems confused, then read the question again or provide additional assistance based on this “Guide” or as you, the enumerator, deem appropriate.

In general, you should accept the responses given by the respondent. Nevertheless, if the respondent says something—or if you see or sense something—that suggests that the response may not be accurate, that the respondent is uncertain, or that the respondent desires assistance in figuring out how to respond, then you should read the question again and provide whatever help you deem appropriate based on this “Guide”.

While most indicators in the scorecard are verifiable, you do not—in general—need to verify responses. You should verify a response only if something suggests to you that the response may be inaccurate and thus that verification might improve data accuracy. For example, you might choose to verify if the respondent hesitates, seems nervous, or otherwise gives signals that he/she may be lying, confused, or uncertain. Likewise, verification is probably appropriate if a child in the household or a neighbor says something that does not square with a respondent’s answer. Verification is also a good idea if you can see something yourself—such as a consumer durable that the respondent avers not to possess, or a child eating in the room who has not been counted as a member of the household—that suggests that a response may be inaccurate.

In general, the application of the scorecard should mimic as closely as possible the application of the 2015/16 KIHBS by the KNBS. For example, interviews should take place in respondents’ homesteads because the 2015/16 KIHBS took place in respondents’ homesteads.

### **Translation:**

As of this writing, the scorecard itself, the “Back-page Worksheet”, and this “Guide” are available only in English, Swahili, Kikuyu, Dholuo, Kamba, Ekegusii, Kimeru, and Kalenjin. There are not yet official, professional translations to other major local languages spoken in Kenya such as Luhya, Maasai, Somali, and Embu. Users should check [scorocs.com](http://scorocs.com) to see what translations have been completed since this writing.

If there is not yet a professional translation to a given local language, then users should contact the author of this document for help in creating such a translation.

## **Who should be the respondent?**

Remember that the respondent does not need to be the same person as the household member who is a participant with your organization (although the respondent may be that person).

According to p. 14 of the *Manual*, the respondent may be “any responsible adult member of the household who provides information to the enumerator.”

According to p. 17 of the *Manual*, “The questionnaire should be administered to responsible individuals within the household. Where necessary, persons aged 10 years or older can be asked questions directly.”

According to p. 23 of the *Manual*, “The household questionnaire is preferably to be administered to the head of household. If that cannot be done, another knowledgeable person may be interviewed.”

## **Who is the head of the household?**

Note that the head of the household may or may not be the same person who participates with your organization (although the head of the household may be that person).

According to p. 15 of the *Manual*, “The *head of household* is the member of the household who makes key day-to-day decisions pertaining to the household and whose authority is recognized by all other members of the household. The head may be either male or female. In case of doubt, probe further and accept the response given by the household. There must be one and only one head in the household.

“If more than one individual in a potential household claims headship or if individuals within a potential household give conflicting statements as to who is the head of household, it is very likely that you are dealing with two or more households, rather than one. In such cases, it is extremely important that you apply the criteria provided to delimit membership in the survey household.”

## Role of the Enumerator

According to pp. 7–8 of the *Manual*, “The ultimate outcome of the survey depends on how the interviewer conducts the interview. It is important for an interviewer to be consistent in the way he or she phrases the questions to the respondent. In case a response is not clear or is rather vague, the interviewer should ask or probe further.

“No mention of immediate benefits should be made to the respondent, as this may prejudice the responses.”

According to page 17 of the *Manual*, “Ensure that the setting of the interview is relatively private. You should respect the respondent’s right to privacy. . . . No person except the [members of your organization who have a legitimate reason to be with you] should come with you when you interview. If [someone from your organization] accompanies you to an interview, you should always ensure that you introduce him or her to the respondent whilst making clear the purpose of his or her presence.

“Any other persons not connected to [your organization] or to the household should not be present when you are administering the questionnaire. If any such individual is present when you begin your interviews, you must politely request him or her to leave in order to respect the privacy of the interviewed household. If he or she cannot leave at that time, then you should reschedule the interview for a later time or move to a more appropriate place, when or where greater privacy can be assured.”

According to pp. 18–20 of the *Manual*, “Always be courteous and tactful in your dealings with respondents. Above all, your attitude towards the respondents in the surveyed households must be one of respect. You must always be patient towards the respondents. Always act in a way that warrants respect and cooperation from the respondent. During your interviews, you should work efficiently and relatively quickly, but you should not rush the respondents or make mistakes. After each interview, you should thank each respondent for his or her help and time. This is vital if the survey is to be carried out successfully.

“You should always be ready to answer any questions that the respondents ask you about the survey and its particular contents. . . .

“At the start of the interview, you should always determine if the respondent has [enough time available to complete the interview]. . . . If the respondent must leave, arrange for another meeting . . . to complete the interview.

“Moreover, you should seek to develop a smooth-flowing interviewing style so that you can obtain all of the information required from an individual in the shortest possible time. You should attempt a compromise between:

- Maintaining a smooth-flowing, continuous dialogue that allows you to obtain all of the information required in the shortest possible time—that is, without testing the patience of the respondents by delaying the interview in any way—and
- Allowing the respondents to ask any questions that they have about the survey so that they are convinced of its value and hence be cooperative

“At all stages of the interview with members of a surveyed household, you should be alert to incorrect responses or omissions. These can be accidental or deliberate.

“For example, if the respondent says that [no members of the household have a mobile phone] but there is [a household member talking on a mobile phone] nearby, then you should tactfully probe about this [mobile phone]. However, you should not probe excessively after seeking initial clarification from the respondent. In any case, you should never go outside of the household to get information. This is beyond the scope of your work.

“In summary, the general rules on conduct for interviewers are:

- Read the questions clearly according to descriptions, and do not be too fast
- Read questions without adding, reducing, or changing the words. If the respondent does not understand, then repeat the question slowly; do not explain in your own words
- Do not change the chronology of questions (deviation can change the answer)
- Do not pass a question due to previous answers or since you know the answer
- Do not show the respondent that you are in hurry or tired. Give him or her time to think on his or her response
- Avoid long discussions of the questions with the respondents. If you are receiving irrelevant or complicated answers, then listen to the respondent and lead him or her back to the original question
- It is extremely important that you should remain absolutely neutral about the subject of the interview. You must not show any surprise, approval, or disapproval about the answers given by the respondent, and you must [not] give him or her your opinion about these things yourself



“Read the questions exactly as they are written in the questionnaire, following the established order.

“After reading a question once in a clear and comprehensible manner, you should wait for a response. If the respondent hesitates to answer, then he or she has probably:

- Not heard the question
- Not understood the question, or
- Does not know the answer

“In any case, if there is no answer, repeat the question. If there is still no reply, you must ask whether the question has been understood. If the answer is ‘No’, then you may reword the question. If the difficulty lies in finding the right answer, then you should help the respondent to consider his or her reply.”

According to p. 27 of the *Manual*, “Before you start the interview, introduce yourself to the respondent and explain the purpose of the survey. Say: ‘Greetings! My name is [your name]. I work for [your organization]. We are doing a survey of some of our participants in order to get to know them better.]

‘Your household has been randomly selected to participate in the survey. . . . The information provided by your household will be treated in strict confidence.

‘I therefore would like to ask you some questions as a responsible member of this household. . . .

‘Do you have any questions you would like me to respond to before we proceed with the interview?’”

## Guidelines for each indicator in the scorecard

1. How many household members are there?
  - A. Eight or more
  - B. Seven
  - C. Six
  - D. Five
  - E. Four
  - F. Three
  - G. Two
  - H. One

According to pp. 14–15 of the *Manual*, “A *household* is defined as a person or a group of people living in the same compound (fenced or unfenced) who are answerable to the same head and who share a common source of food and/or income as a single unit in the sense that they have common housekeeping arrangements, that is, they share or are supported by a common budget.

“It is important to note the three elements of this definition, namely:

- Do they live in the same compound?
- Are they answerable to the same and one head?
- Do they share a common source of food and/or income?

“If any response to these three questions is ‘No’, then this is not one household but more than one.

“It is possible that individuals who are not members of the household may be residing with the household at the time of the survey.

“In most cases, but not all, someone who does not regularly live with the household during the survey period, based on some criterion (that is, how many months the member has lived in the household) is not a current member of the household.

“Examples of who is and who is not a household member are given below. It is important to recognize that members of a household need not necessarily be related by blood or marriage. Similarly, not all those who are related and are living in the same compound or dwelling are necessarily members of the same household.

“For example, two brothers who live in the same dwelling with their own wives and children may or may not form a common housekeeping arrangement. If they do not, then they should be considered separate households.

“One should make a distinction between *family* and *household*. The first (*family*) reflects social relationships, blood descent, and marriage. The second (*household*) is used here to identify an economic unit. While families and households are often the same, this is not necessarily the case. You must be cautious and use the criteria provided on household membership to determine which individuals make up a particular households.

“In the case of polygamous unions and extended family systems, household members may be distributed over two or more dwellings. If these dwelling units are in the same compound or nearby and if they have a common housekeeping arrangement with a common household budget, then the residents of these separate dwelling units should be treated as one household.

“Having identified a household, it then becomes necessary to determine who is and who is not a member of that household. [A *member of a household* is someone who fulfills all of the following criteria:

- Lives in the same compound with the household
- Answers to the head of the household [or is the head]
- Share food or income with the household
- [Has fulfilled the previous three criteria for at least three months]

“However, there are several exceptions to this rule:

- Infants less than 3-months-old
- New spouses who have recently come into the household and who are now residing with the household
- Household members residing in an institution elsewhere, but still dependent on the household. This principally includes boarding-school students. However, it does not include military personnel, prisoners, or other individuals who are not primarily dependent on the household for their welfare

“It is important to highlight that non-relatives who are resident in the household for more than three months and who are included in a common household-keeping arrangement under the head of household and are considered household members. However, servants, other hired workers, and lodgers (individuals who pay to reside in the dwelling of the household) should not be considered to be household members if they have their own household elsewhere which they head or upon which they are dependent.”

Page 1 of “Questionnaire 1A” defines a *household* as people who usually live and eat their meals together.

According to pp. 27–28 of the *Manual*, “[You the enumerator] should strictly follow the criteria of identifying a household to determine who should be included and who should not be included as a member of the household.

“The process of listing household members should be done carefully to ensure that no one is missed. List the names of all members of your immediate or nuclear family (head of household, spouse/spouses, and their children). The children are listed by order of birth. List the household head on the first line, [and list the (eldest) spouse of the household head (if he/she exists) on the second line]. Next, list all other persons related to the head of household or other household members. These include nephews, cousins, grandchildren and so on. Then list all non-relatives in the household who normally reside there and who have common eating arrangements (such as live-in servants and friends). Finally, list any other usual members of the household who slept with the household in the night prior to the interview.

“To ensure complete coverage, you the interviewer should explicitly ask about three types of persons who are commonly overlooked by survey respondents, namely:

- Persons who are temporarily absent should be included. This includes children in boarding schools and usual members of the household who may have travelled for a few days
- Persons who have come to stay in the household permanently are usual household members even if they have just moved in
- Servants or lodgers/visitors. It is possible that these individuals are members of a separate household (see the definition of *household*). If this is the case, then they should not be included as members of the household being interviewed. If, on the other hand, there is no obvious indication that they belong to another household, then they should be included

“Finally, you the interviewer should ask whether there are any infants or small children who have not been listed, as very young children are often overlooked in counting household members.

“The person listed first will always be the head of the household. The head must be a usual member of the household. If the respondent to the questionnaire is not the head of the household, then the head of the household (not the respondent) will still be listed in the first row. If the head of the household is absent at the time of interview, then he or she will still be listed in the first row.”

2. How many household members have a mobile phone?
  - A. None
  - B. One
  - C. Two or more

According to p. 61 of the *Manual*, “Mobile phones supplied by employers that can be used for personal use (to make calls, access personal information on the internet via the phone, and so) are to be included. Individuals with only an active SIM card and have no mobile phone of their own but who borrow a mobile device from other people are *not* considered to own a mobile phone.”

3. Do any household members have a disability that gives them difficulties in engaging in an economic activity?
  - A. Yes
  - B. No

According to p. 52 of the *Manual*, the concept of *disability* “includes both physical and mental disabilities. The question seeks to capture conditions which are permanent. Physical and mental disabilities to be considered here are those which prevent the person from maintaining a significant economic activity or schooling. This may be some physical impairment of limbs, a physical disease, or mental illness which renders the person incapable of pursuing normal day-to-day activities.”

According to p. 37 of the *Manual*, “The concept of *work* covers all persons undertaking economic activities either for pay, profit, or family gain. The concept of *economic activity* includes all market production and certain types of non-market production. It comprises any activity performed by persons of any sex or age to produce goods or to provide services for use by others, or for own use. *Work* excludes activities that do not involve producing goods or services (for example, begging and stealing), self-care (for example, personal grooming and hygiene), and activities that cannot be performed by another person on one’s own behalf (for example, sleeping, learning, and activities for one’s own recreation). Work can be performed in any kind of economic unit comprising market units, non-market units, and households that produce goods or services for own final use.”

4. In the last 7 days, did any household members work at least one hour on their own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on?
- A. No
  - B. Yes

According to p. 39 of the *Manual*, “This comprises self-employed persons who worked on own businesses or persons who worked on family businesses for family gain and welfare. Includes ‘*jua kali*’ artisans, mechanics, traders of farm produce, and family workers who are not on wage employment. However, if a family member is working for pay, then he or she should not be counted as self-employed for the purposes of this question.”

For the purposes of this question, do *not* count as self-employed nor as business owners anyone working in agricultural activities.

According to p. 38 of the *Manual*, “The concept of *work* covers all persons undertaking economic activities either for pay, profit, or family gain. The concept of *economic activity* includes all market production and certain types of non-market production. It comprises any activity performed by persons of any sex or age to produce goods or to provide services for use by others, or for own use. *Work* excludes activities that do not involve producing goods or services (for example, begging and stealing), self-care (for example, personal grooming and hygiene), and activities that cannot be performed by another person on one’s own behalf (for example, sleeping, learning, and activities for one’s own recreation). Work can be performed in any kind of economic unit comprising market units, non-market units, and households that produce goods or services for own final use.”

5. In the last 7 days, were any household members casual workers in their main/primary job?
- A. Yes
  - B. No

According to pp. 43–44 of the *Manual*, *casual workers* differ from *regular workers* who have other types of employment arrangements based on the following definitions:

- “*Casual workers* are persons for whom their terms of engagements provide for payment at the end of each day and who are not engaged for a period longer than 90 days. They have no formal employment contract with the employer, and their services may be done away with without notice. Casual [workers] are generally engaged for manual work
- *Regular workers* include both paid employees and self-employed persons. For paid employees, regular workers are those with stable contracts for whom the employing organisation is responsible for payment of relevant taxes and social-security contributions and/or where the contractual relationship is subject to prevailing labour regulations. For self-employed persons, regular workers are those who work in their own establishments or farms on a continuous basis”

According to p. 38 of the *Manual*, “A *job* is defined as set of tasks and duties which are carried, out by, or can be assigned to, one person.”

According to pp. 42 of the *Manual*, “The [*main/primary job*] over the past 7 days is either a person’s only job or the job in which the person worked the most hours (if the person worked at more than one job). For people with two or more jobs with the same number of hours, the main/primary job is the one that gives the largest income. If two or more jobs are equal in number of hours and income, then the main/primary job is the one that the respondent considers to be his or her main/primary job.”



6. Can the male head/spouse read and write in any language?
- A. No
  - B. No male head/spouse
  - C. Yes

According to p. 36 of the *Manual*, “The aim here is to record general literacy (the ability to read and write). Testing on ability to read and write will *not* be done. Literacy can be in any language, not just in the main or official language.”

Remember that you already know the name of the male head/spouse (and whether he exists) from compiling the “Back-page Worksheet”. Thus, if there is a male head/spouse, do not mechanically ask, “Can the male head/spouse read and write in any language?”. Instead, use the actual first name or nickname of the male head/spouse, for example: “Can Ephraim read and write in any language?” If there is no male head/spouse, then do not ask the question of the respondent but rather mark “B. No male head/spouse” and go to the next question.

For the purposes of the scorecard, the *male head/spouse* is defined as:

- The household head, if the head is male
- The spouse/conjugal partner of the household head, if the head is female
- Non-existent, if the head is female and if she does not have a spouse/conjugal partner who is a member of her household

Note that the head of the household may or may not be the same member of the household who is a participant with your organization (although the head of the household can be that person).

7. What is the highest educational level that the (eldest) female head/spouse reached, and what is the highest grade that she completed at that level?
- A. None, madrassa/*duksi*, pre-primary, primary grade 1, or other
  - B. Primary grades 2 to 6
  - C. Primary grades 7 or 8
  - D. No female head/spouse
  - E. Secondary years 1 to 3
  - F. Secondary year 4, or higher

According to pp. 33–34 of the *Manual*, “This question seeks information on the highest educational level and grade that the (eldest) female head/spouse has completed. To be recorded as having completed a grade, the (eldest) female head/spouse must have actually finished the grade in a particular level. The (eldest) female head/spouse may have attended a grade but may not have completed it. If the (eldest) female head/spouse is attending school this year, then the highest grade completed should be one year lower than the highest grade reached. And if the (eldest) female head/spouse is not attending school this year, then the highest grade completed may be the same as the highest grade reached or one grade below it, but not greater.

“For example, if the (eldest) female head/spouse attended Standard 6 but never finished that class, then she would be recorded as having completed Standard 5. If the (eldest) female head/spouse is currently attending Form 3, then she would be recorded as having completed Form 2. The international grades and levels can be captured under ‘A. None, madrassa/*duksi*, pre-primary, primary grade 1, or other’.”

Remember that you already know the name of the (eldest) female head/spouse (and whether she exists) from compiling the “Back-page Worksheet”. Thus, if there is a female head/spouse, do not mechanically ask, “What is the highest educational level that the (eldest) female head/spouse reached, and what is the highest grade that she completed at that level?”. Instead, use the actual name of the (eldest) female head/spouse, for example: “What is the highest educational level that Everline reached, and what is the highest grade that she completed at that level?” If there is no female head/spouse, then do not ask the question of the respondent but rather mark “D. No female head/spouse” and go to the next question.

For the purposes of the scorecard, the *(eldest) female head/spouse* is defined as:

- The household head, if the head is female
- The (eldest) spouse/conjugal partner of the household head, if the head is male
- Non-existent, if the head is male and if he does not have a spouse/conjugal partner who is a member of his household

Note that the head of the household may or may not be the same person who is a participant with your organization (although the head of the household can be that person).

8. How many habitable rooms does this household occupy in its main dwelling (do not count bathrooms, toilets, storerooms, or garages)?
- A. One, or none
  - B. Two
  - C. Three
  - D. Four or more

According to p. 16 of the *Manual*, “A *habitable room* in a dwelling unit is one mainly used for living. It excludes storerooms, granaries, offices, toilets and garages. A kitchen, under normal circumstances, should not be counted as a habitable room. However, if the household uses the kitchen for eating and/or sleeping purposes or even for purposes of entertaining guests, then it should be counted as a habitable room. The same applies to storerooms and garages.

A *dwelling unit* is “a place of abode or residence occupied by one or more households with a private entrance. There can be many dwelling units within a structure.”

According to p. 72 of the *Manual*, “*Habitable rooms* refers to those that are used for living and excludes bathrooms, toilets, storerooms, garages, and so on. If a room is used for functions beyond those conventionally accepted, then it may be included as a habitable room. For example, if a garage or storeroom is also used for sleeping, then it should be counted as a habitable room. A room that is divided by a curtain or some cartons should just be considered as one room. Remember to include all rooms that are habitable even though they may currently be underutilized such as is the case with guest rooms.

“Enter the number of rooms for the main dwelling.”

9. What is the predominant wall material of the main dwelling unit?
- A. Cane/palm/trunks, mud/cow dung, grass/reeds, no walls, or other
  - B. Corrugated iron sheets, plywood, cardboard, or reused wood
  - C. Bamboo with mud, stone with mud, uncovered adobe, covered adobe, stone with lime/cement, cement, bricks, cement blocks, or wood planks/shingles

According to p. 72 of the *Manual*, “Record the dominant wall material for the main dwelling unit. For example, if a house’s wall is made of stones up to, say, a foot from the ground, and the other part is wood, then the dominant material is wood.

“Note that the wall materials are mostly observable and hence you may not need to pose the question to the respondent.”

According to p. 69 of the *Manual*, “[This question] is easily observable and may therefore be recorded without posing the question to the respondent. However, it should not be taken that the response to the questions can just be recorded without reference to the respondent. You the interviewer are always encouraged to check with the respondent.”

According to p. 20 of the *Manual*, “to record responses that are not covered by any of the pre-coded responses”, you should mark response option “A. Cane/palm/trunks, mud/cow dung, grass/reeds, no walls, or other”.

10. Does the household have a functional television?

A. No

B. Yes

The *Manual* has no additional information related with this indicator.

**Table 1 (Kenya): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		83	186	279	372
	Rate	Households	8,681	2.5	20.7	45.2	64.4
	Rate	People		3.9	29.1	55.1	73.0
<b>Rural</b>	Line	People		65	108	162	215
	Rate	Households	13,092	8.7	32.5	58.4	74.8
	Rate	People		11.2	40.1	67.6	82.7
<b>All</b>	Line	People		71	136	204	272
	Rate	Households	21,773	6.0	27.4	52.7	70.2
	Rate	People		8.6	36.1	63.1	79.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kenya): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		123	197	246	492	108	181	312	1,231
	Rate	Households	8,681	15.0	34.1	46.5	81.6	11.1	29.8	59.7	98.2
	Rate	People		23.9	47.6	60.6	89.6	18.4	42.5	72.6	99.1
<b>Rural</b>	Line	People		96	153	191	382	84	141	242	956
	Rate	Households	13,092	38.9	67.1	77.6	95.5	31.2	62.4	86.1	99.8
	Rate	People		49.0	77.4	86.5	98.2	40.0	73.1	92.8	99.9
<b>All</b>	Line	People		105	169	211	421	92	155	267	1,054
	Rate	Households	21,773	28.5	52.7	64.1	89.5	22.4	48.2	74.6	99.1
	Rate	People		40.0	66.8	77.2	95.2	32.2	62.2	85.6	99.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Kenya): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		78	59	78	116	141	173	284
	Rate	Households	8,681	2.8	1.3	3.2	9.4	14.5	21.1	45.2
	Rate	People		4.8	2.4	5.3	15.3	22.4	31.2	58.7
<b>Rural</b>	Line	People		63	47	63	93	114	139	229
	Rate	Households	13,092	19.2	10.6	21.4	43.4	54.6	65.8	85.1
	Rate	People		25.5	14.2	28.2	53.8	65.4	76.0	91.9
<b>All</b>	Line	People		68	52	69	101	124	151	248
	Rate	Households	21,773	12.1	6.5	13.5	28.6	37.1	46.3	67.7
	Rate	People		18.1	10.0	20.0	40.0	50.0	60.0	80.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nairobi): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		86	203	304	406
	Rate	Households	554	0.6	11.3	33.0	53.1
	Rate	People		0.6	16.7	41.7	62.4
<b>Rural</b>	Line	People		—	—	—	—
	Rate	Households	—	—	—	—	—
	Rate	People		—	—	—	—
<b>All</b>	Line	People		86	203	304	406
	Rate	Households	554	0.6	11.3	33.0	53.1
	Rate	People		0.6	16.7	41.7	62.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nairobi): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		121	194	243	485	106	179	308	1,214
	Rate	Households	554	3.4	20.0	30.9	71.0	2.1	15.0	44.9	96.0
	Rate	People		5.3	28.7	42.7	80.7	3.2	22.0	57.8	97.8
<b>Rural</b>	Line	People		—	—	—	—	—	—	—	—
	Rate	Households	—	—	—	—	—	—	—	—	—
	Rate	People		—	—	—	—	—	—	—	—
<b>All</b>	Line	People		121	194	243	485	106	179	308	1,214
	Rate	Households	554	3.4	20.0	30.9	71.0	2.1	15.0	44.9	96.0
	Rate	People		5.3	28.7	42.7	80.7	3.2	22.0	57.8	97.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nairobi): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		77	58	77	114	139	170	280
	Rate	Households	554	0.4	0.2	0.4	1.7	4.3	9.6	31.8
	Rate	People		0.5	0.2	0.5	2.7	6.3	13.5	42.4
<b>Rural</b>	Line	People		—	—	—	—	—	—	—
	Rate	Households	—	—	—	—	—	—	—	—
	Rate	People		—	—	—	—	—	—	—
<b>All</b>	Line	People		77	58	77	114	139	170	280
	Rate	Households	554	0.4	0.2	0.4	1.7	4.3	9.6	31.8
	Rate	People		0.5	0.2	0.5	2.7	6.3	13.5	42.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Mombasa): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		88	206	310	413
	Rate	Households	460	1.3	17.5	44.0	67.1
	Rate	People		2.2	27.1	53.3	74.1
<b>Rural</b>	Line	People		—	—	—	—
	Rate	Households	—	—	—	—	—
	Rate	People		—	—	—	—
<b>All</b>	Line	People		88	206	310	413
	Rate	Households	460	1.3	17.5	44.0	67.1
	Rate	People		2.2	27.1	53.3	74.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Mombasa): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		123	197	247	493	108	182	313	1,234
	Rate	Households	460	8.3	23.3	38.9	83.2	5.1	19.8	54.4	99.4
	Rate	People		14.9	35.0	51.2	90.0	9.5	31.4	66.4	99.8
<b>Rural</b>	Line	People		—	—	—	—	—	—	—	—
	Rate	Households	—	—	—	—	—	—	—	—	—
	Rate	People		—	—	—	—	—	—	—	—
<b>All</b>	Line	People		123	197	247	493	108	182	313	1,234
	Rate	Households	460	8.3	23.3	38.9	83.2	5.1	19.8	54.4	99.4
	Rate	People		14.9	35.0	51.2	90.0	9.5	31.4	66.4	99.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Mombasa): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
							40th	50th	60th	
<b>Urban</b>	Line	People		78	59	79	116	142	173	285
	Rate	Households	460	0.7	0.5	0.7	3.6	7.1	11.7	33.0
	Rate	People		1.2	1.1	1.2	7.7	13.6	21.1	47.3
<b>Rural</b>	Line	People		—	—	—	—	—	—	—
	Rate	Households	—	—	—	—	—	—	—	—
	Rate	People		—	—	—	—	—	—	—
<b>All</b>	Line	People		78	59	79	116	142	173	285
	Rate	Households	460	0.7	0.5	0.7	3.6	7.1	11.7	33.0
	Rate	People		1.2	1.1	1.2	7.7	13.6	21.1	47.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Baringo): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		80	183	274	365
	Rate	Households	143	1.1	19.2	45.0	64.1
	Rate	People		1.7	31.3	63.0	76.3
<b>Rural</b>	Line	People		64	106	160	213
	Rate	Households	294	8.4	34.2	55.3	70.3
	Rate	People		9.8	41.1	65.7	80.5
<b>All</b>	Line	People		66	118	177	237
	Rate	Households	437	7.0	31.4	53.3	69.2
	Rate	People		8.5	39.6	65.3	79.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Baringo): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		115	185	231	462	101	170	293	1,155
	Rate	Households	143	8.9	27.3	41.3	83.6	6.6	23.5	58.2	99.6
	Rate	People		13.3	42.7	59.1	93.4	9.6	37.8	75.7	99.9
<b>Rural</b>	Line	People		94	151	189	377	83	139	239	944
	Rate	Households	294	38.0	65.1	74.1	94.2	29.3	58.8	83.6	100.0
	Rate	People		47.5	77.9	84.8	96.9	37.0	70.5	92.5	100.0
<b>All</b>	Line	People		98	156	195	391	86	144	248	977
	Rate	Households	437	32.4	57.9	67.9	92.2	25.0	52.1	78.8	99.9
	Rate	People		42.1	72.4	80.8	96.3	32.8	65.4	89.9	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Baringo): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		73	55	74	109	133	162	266
	Rate	Households	143	3.7	0.6	3.7	8.2	12.6	19.9	47.8
	Rate	People		5.0	0.7	5.0	12.1	19.7	32.9	66.4
<b>Rural</b>	Line	People		62	47	62	92	112	137	226
	Rate	Households	294	19.9	9.9	21.1	44.1	52.5	61.0	80.5
	Rate	People		26.5	12.5	27.7	54.8	62.8	72.4	90.5
<b>All</b>	Line	People		64	48	64	95	116	141	232
	Rate	Households	437	16.8	8.2	17.8	37.3	44.9	53.2	74.3
	Rate	People		23.1	10.7	24.2	48.1	56.1	66.2	86.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Bomet): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		62	112	168	223
	Rate	Households	140	6.0	26.9	65.7	76.5
	Rate	People		11.4	33.1	76.3	86.0
<b>Rural</b>	Line	People		57	95	143	190
	Rate	Households	346	3.5	42.3	75.1	87.8
	Rate	People		4.9	50.6	83.7	93.5
<b>All</b>	Line	People		58	97	145	193
	Rate	Households	486	3.8	40.4	74.0	86.4
	Rate	People		5.5	48.8	83.0	92.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Bomet): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		110	175	219	438	96	162	278	1,096
	Rate	Households	140	45.1	60.0	72.6	94.4	39.9	58.7	83.0	100.0
	Rate	People		62.9	76.3	85.8	98.3	56.3	75.2	93.0	100.0
<b>Rural</b>	Line	People		84	135	169	337	74	124	214	844
	Rate	Households	346	49.9	81.5	90.3	98.6	39.0	78.2	95.2	99.6
	Rate	People		60.5	90.5	96.6	99.7	48.0	88.2	98.6	99.9
<b>All</b>	Line	People		87	139	174	347	76	128	220	869
	Rate	Households	486	49.3	78.9	88.1	98.1	39.1	75.8	93.7	99.7
	Rate	People		60.7	89.1	95.5	99.6	48.8	86.9	98.0	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Bomet): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		70	53	70	103	126	154	253
	Rate	Households	140	20.3	8.4	21.1	46.4	52.9	56.5	75.6
	Rate	People		31.9	15.1	32.7	63.6	70.1	73.4	89.9
<b>Rural</b>	Line	People		56	42	56	82	100	123	202
	Rate	Households	346	38.7	21.1	41.4	69.2	80.2	88.3	96.6
	Rate	People		48.3	26.4	51.2	79.6	89.7	95.7	98.9
<b>All</b>	Line	People		57	43	57	84	103	126	207
	Rate	Households	486	36.4	19.6	38.9	66.4	76.9	84.4	94.0
	Rate	People		46.7	25.3	49.4	78.0	87.7	93.5	98.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Bungoma): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		82	177	266	354
	Rate	Households	151	2.9	36.4	60.6	72.3
	Rate	People		3.2	43.1	69.3	80.1
<b>Rural</b>	Line	People		65	108	162	216
	Rate	Households	336	8.3	29.1	64.0	81.4
	Rate	People		9.6	34.6	73.9	88.8
<b>All</b>	Line	People		67	117	176	234
	Rate	Households	487	7.4	30.2	63.4	80.0
	Rate	People		8.8	35.7	73.3	87.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Bungoma): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		124	198	248	496	109	183	315	1,242
	Rate	Households	151	27.4	51.8	64.1	86.9	20.6	49.5	73.3	97.2
	Rate	People		38.2	63.2	74.4	93.5	30.3	60.5	83.4	97.6
<b>Rural</b>	Line	People		96	154	192	384	84	142	243	960
	Rate	Households	336	43.6	74.3	82.6	94.7	34.9	70.9	89.1	100.0
	Rate	People		51.1	85.4	91.1	98.6	41.7	81.7	96.1	100.0
<b>All</b>	Line	People		100	159	199	398	87	147	253	997
	Rate	Households	487	41.1	70.8	79.7	93.5	32.7	67.6	86.7	99.6
	Rate	People		49.4	82.5	88.9	98.0	40.3	78.9	94.4	99.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Bungoma): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		79	59	79	117	143	174	286
	Rate	Households	151	4.9	1.3	5.4	16.0	23.5	35.4	59.9
	Rate	People		6.3	1.3	7.6	23.6	34.1	49.0	71.1
<b>Rural</b>	Line	People		63	48	63	94	114	140	230
	Rate	Households	336	17.5	8.8	19.1	48.1	60.4	72.8	88.5
	Rate	People		21.1	10.8	23.0	57.0	70.2	82.5	95.7
<b>All</b>	Line	People		65	49	66	97	118	144	237
	Rate	Households	487	15.5	7.6	17.0	43.1	54.7	67.0	84.1
	Rate	People		19.1	9.5	21.0	52.7	65.5	78.1	92.5

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Busia): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		86	192	288	384
	Rate	Households	135	8.3	42.8	70.5	83.5
	Rate	People		14.4	54.5	80.6	90.7
<b>Rural</b>	Line	People		66	110	165	221
	Rate	Households	337	20.8	62.6	87.2	94.9
	Rate	People		28.2	71.0	90.8	96.9
<b>All</b>	Line	People		68	119	178	237
	Rate	Households	472	19.1	59.9	84.9	93.4
	Rate	People		26.8	69.3	89.8	96.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Busia): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		127	204	255	510	112	188	323	1,275
	Rate	Households	135	38.1	56.9	69.2	90.9	31.2	54.6	78.6	99.9
	Rate	People		53.3	75.3	85.9	95.7	45.6	73.8	91.6	100.0
<b>Rural</b>	Line	People		98	157	196	391	86	144	248	979
	Rate	Households	337	68.3	91.1	94.9	99.6	58.7	87.1	97.3	99.6
	Rate	People		78.8	95.5	97.3	99.9	70.5	93.2	98.6	99.9
<b>All</b>	Line	People		101	161	202	403	88	149	256	1,009
	Rate	Households	472	64.2	86.4	91.4	98.4	54.9	82.6	94.8	99.7
	Rate	People		76.2	93.5	96.1	99.5	68.0	91.2	97.9	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Busia): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
<b>Urban</b>	Line	People		81	61	81	120	146	179	294
	Rate	Households	135	6.0	2.9	7.4	25.4	32.5	40.1	63.8
	Rate	People		12.3	5.8	13.9	38.8	46.7	54.3	82.4
<b>Rural</b>	Line	People		65	49	65	95	117	142	234
	Rate	Households	337	33.7	17.2	37.2	68.0	79.7	87.7	96.8
	Rate	People		44.1	22.6	48.2	78.7	88.4	93.2	98.4
<b>All</b>	Line	People		66	50	66	98	120	146	240
	Rate	Households	472	29.9	15.2	33.1	62.1	73.2	81.1	92.3
	Rate	People		40.9	20.9	44.7	74.7	84.2	89.3	96.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Elgeyo/Marakwet): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		70	138	208	277
	Rate	Households	150	8.9	41.5	68.4	80.3
	Rate	People		9.9	49.0	76.0	85.2
<b>Rural</b>	Line	People		67	112	168	224
	Rate	Households	290	10.0	38.0	65.7	79.9
	Rate	People		12.6	42.5	73.4	84.8
<b>All</b>	Line	People		68	116	174	232
	Rate	Households	440	9.8	38.5	66.1	80.0
	Rate	People		12.2	43.4	73.8	84.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Elgeyo/Marakwet): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		116	185	231	463	101	171	294	1,159
	Rate	Households	150	46.4	67.6	78.4	92.2	42.2	64.2	87.5	100.0
	Rate	People		55.9	76.2	86.2	96.1	50.3	73.6	94.5	100.0
<b>Rural</b>	Line	People		99	159	198	397	87	146	252	993
	Rate	Households	290	46.1	73.7	82.0	97.9	38.2	69.4	90.8	100.0
	Rate	People		53.3	81.4	88.3	99.2	45.8	77.2	94.7	100.0
<b>All</b>	Line	People		102	163	203	407	89	150	258	1,017
	Rate	Households	440	46.2	72.8	81.5	97.1	38.8	68.7	90.3	100.0
	Rate	People		53.7	80.6	88.0	98.7	46.5	76.7	94.6	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Elgeyo/Marakwet): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		74	55	74	109	133	162	267
	Rate	Households	150	18.0	6.3	19.0	39.3	47.5	61.2	79.3
	Rate	People		22.0	7.9	23.0	47.7	56.9	69.8	86.9
<b>Rural</b>	Line	People		65	49	66	97	118	144	237
	Rate	Households	290	17.8	11.4	18.9	45.7	58.7	72.5	86.1
	Rate	People		23.3	14.8	25.1	54.4	68.2	79.0	91.1
<b>All</b>	Line	People		67	50	67	99	120	147	242
	Rate	Households	440	17.8	10.6	18.9	44.7	57.1	70.8	85.1
	Rate	People		23.1	13.8	24.8	53.4	66.5	77.7	90.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Embu): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		74	155	232	309
	Rate	Households	146	1.5	16.2	35.2	56.5
	Rate	People		3.7	22.3	42.7	62.0
<b>Rural</b>	Line	People		62	103	155	207
	Rate	Households	308	4.6	23.8	49.4	68.5
	Rate	People		4.0	29.2	55.4	76.1
<b>All</b>	Line	People		64	111	167	222
	Rate	Households	454	4.0	22.4	46.8	66.2
	Rate	People		4.0	28.2	53.5	74.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Embu): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		115	185	231	462	101	170	293	1,155
	Rate	Households	146	17.4	31.1	43.9	87.0	13.5	26.8	60.7	100.0
	Rate	People		25.5	40.6	53.3	94.7	19.8	36.8	73.6	100.0
<b>Rural</b>	Line	People		92	147	183	367	80	135	233	918
	Rate	Households	308	25.7	56.1	70.3	91.4	18.7	49.3	79.2	99.6
	Rate	People		32.8	65.8	79.7	95.8	24.9	58.9	87.4	99.9
<b>All</b>	Line	People		95	152	191	381	83	141	242	953
	Rate	Households	454	24.1	51.4	65.4	90.6	17.7	45.1	75.7	99.7
	Rate	People		31.7	62.1	75.8	95.6	24.1	55.6	85.4	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Embu): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		73	55	74	109	133	162	266
	Rate	Households	146	4.3	1.0	6.0	13.8	17.9	25.1	47.3
	Rate	People		8.6	2.8	11.2	22.2	26.4	34.5	58.2
<b>Rural</b>	Line	People		61	46	61	90	109	133	219
	Rate	Households	308	13.4	5.8	15.0	32.8	45.0	59.0	82.0
	Rate	People		18.4	6.7	20.6	40.0	53.3	66.2	88.4
<b>All</b>	Line	People		62	47	63	92	113	138	226
	Rate	Households	454	11.7	4.9	13.3	29.3	39.9	52.7	75.6
	Rate	People		16.9	6.1	19.2	37.3	49.3	61.5	83.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Garissa): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		92	215	323	431
	Rate	Households	169	2.0	46.8	77.7	90.9
	Rate	People		2.2	56.6	81.5	96.4
<b>Rural</b>	Line	People		73	122	183	244
	Rate	Households	253	30.8	67.9	88.6	95.3
	Rate	People		35.3	70.1	90.5	96.9
<b>All</b>	Line	People		80	154	231	309
	Rate	Households	422	19.4	59.6	84.3	93.6
	Rate	People		23.8	65.5	87.4	96.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Garissa): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		130	207	259	518	114	191	329	1,297
	Rate	Households	169	27.6	57.7	74.9	93.7	15.1	56.1	85.6	100.0
	Rate	People		36.7	72.3	83.4	98.0	21.3	71.1	91.2	100.0
<b>Rural</b>	Line	People		108	173	216	433	95	160	274	1,082
	Rate	Households	253	75.9	94.7	96.6	99.0	69.7	94.1	98.2	100.0
	Rate	People		79.3	96.9	98.5	99.8	74.9	96.4	99.6	100.0
<b>All</b>	Line	People		116	185	231	462	101	171	293	1,157
	Rate	Households	422	56.9	80.2	88.1	96.9	48.2	79.2	93.2	100.0
	Rate	People		64.6	88.4	93.3	99.2	56.3	87.6	96.7	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Garissa): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		82	62	83	122	149	182	299
	Rate	Households	169	1.0	0.6	1.9	9.5	14.3	30.3	69.3
	Rate	People		1.3	0.8	2.4	14.0	20.6	43.0	81.6
<b>Rural</b>	Line	People		71	54	72	106	129	157	259
	Rate	Households	253	37.1	21.8	39.1	62.9	77.4	86.4	97.1
	Rate	People		41.8	26.0	43.7	67.6	80.8	88.9	99.5
<b>All</b>	Line	People		75	57	75	111	136	166	273
	Rate	Households	422	22.9	13.5	24.5	41.9	52.6	64.3	86.1
	Rate	People		27.8	17.2	29.4	49.0	59.9	73.0	93.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Homa Bay): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		73	146	218	291
	Rate	Households	216	5.2	31.3	61.3	78.0
	Rate	People		7.0	36.0	64.2	78.9
<b>Rural</b>	Line	People		64	107	161	215
	Rate	Households	263	5.2	28.1	51.5	71.1
	Rate	People		5.5	32.4	57.3	76.2
<b>All</b>	Line	People		67	120	180	239
	Rate	Households	479	5.2	29.2	54.9	73.5
	Rate	People		5.9	33.5	59.5	77.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Homa Bay): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		120	192	240	480	105	177	304	1,201
	Rate	Households	216	37.7	65.5	79.5	97.0	27.3	59.9	89.2	100.0
	Rate	People		47.4	71.4	84.3	99.1	35.9	66.4	93.7	100.0
<b>Rural</b>	Line	People		95	152	191	381	83	141	242	953
	Rate	Households	263	39.9	64.5	77.9	98.7	29.9	59.1	87.5	100.0
	Rate	People		46.5	73.3	84.7	99.6	34.8	67.2	92.2	100.0
<b>All</b>	Line	People		103	165	206	413	90	152	262	1,033
	Rate	Households	479	39.1	64.8	78.5	98.1	29.0	59.4	88.1	100.0
	Rate	People		46.8	72.7	84.6	99.5	35.2	66.9	92.7	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Homa Bay): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		76	58	77	113	138	168	277
	Rate	Households	216	11.1	6.1	12.4	25.3	37.6	51.6	76.4
	Rate	People		14.9	7.4	16.1	33.1	47.7	59.2	82.3
<b>Rural</b>	Line	People		63	47	63	93	113	139	228
	Rate	Households	263	14.1	6.6	16.5	40.3	51.2	64.5	89.9
	Rate	People		16.4	7.3	19.1	47.2	58.6	73.2	95.3
<b>All</b>	Line	People		67	51	67	99	121	148	244
	Rate	Households	479	13.1	6.4	15.0	35.0	46.4	59.9	85.1
	Rate	People		15.9	7.3	18.1	42.7	55.1	68.7	91.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Isiolo): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		89	206	309	412
	Rate	Households	185	6.4	48.0	67.8	81.5
	Rate	People		8.7	60.7	76.5	87.3
<b>Rural</b>	Line	People		77	128	192	256
	Rate	Households	214	5.8	34.3	74.7	93.9
	Rate	People		9.1	42.2	79.8	96.5
<b>All</b>	Line	People		83	169	254	338
	Rate	Households	399	6.2	42.3	70.7	86.7
	Rate	People		8.9	51.9	78.1	91.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Isiolo): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		128	205	256	512	112	189	325	1,281
	Rate	Households	185	33.5	54.4	65.9	91.5	25.1	50.7	75.0	100.0
	Rate	People		41.7	71.0	77.2	94.8	31.3	64.8	83.1	100.0
<b>Rural</b>	Line	People		114	182	227	454	100	168	288	1,137
	Rate	Households	214	49.4	85.5	94.0	99.2	36.1	79.8	97.1	100.0
	Rate	People		60.1	91.8	97.2	99.9	45.9	89.1	98.8	100.0
<b>All</b>	Line	People		121	194	242	485	106	179	307	1,213
	Rate	Households	399	40.1	67.3	77.5	94.7	29.6	62.7	84.1	100.0
	Rate	People		50.4	80.9	86.7	97.2	38.2	76.3	90.5	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Isiolo): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		81	61	82	120	147	180	295
	Rate	Households	185	4.3	3.5	4.8	14.2	25.2	37.0	64.2
	Rate	People		6.2	5.4	7.2	17.9	31.3	47.6	74.9
<b>Rural</b>	Line	People		75	56	75	111	135	165	272
	Rate	Households	214	5.3	1.4	8.3	23.8	39.5	62.8	85.7
	Rate	People		8.8	2.5	12.7	30.7	48.7	72.0	93.7
<b>All</b>	Line	People		78	59	79	116	141	173	284
	Rate	Households	399	4.7	2.7	6.3	18.2	31.2	47.7	73.1
	Rate	People		7.4	4.0	9.8	24.0	39.6	59.2	83.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kajiado): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		96	223	335	446
	Rate	Households	183	1.9	27.4	54.2	66.4
	Rate	People		2.2	33.0	61.4	75.1
<b>Rural</b>	Line	People		76	126	189	252
	Rate	Households	210	16.2	39.7	61.4	75.1
	Rate	People		21.1	49.8	68.6	80.1
<b>All</b>	Line	People		86	174	262	349
	Rate	Households	393	7.9	32.6	57.2	70.1
	Rate	People		11.7	41.4	65.0	77.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kajiado): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		137	219	274	548	120	202	347	1,370
	Rate	Households	183	14.9	33.9	46.3	79.3	11.4	31.4	61.5	99.4
	Rate	People		20.9	42.3	55.0	89.1	16.8	39.8	70.5	99.8
<b>Rural</b>	Line	People		112	179	224	447	98	165	284	1,119
	Rate	Households	210	45.2	67.6	73.7	96.7	39.4	62.1	86.3	100.0
	Rate	People		56.3	75.8	79.5	98.8	50.5	72.0	90.5	100.0
<b>All</b>	Line	People		124	199	249	497	109	183	315	1,244
	Rate	Households	393	27.7	48.1	57.8	86.7	23.2	44.4	72.0	99.7
	Rate	People		38.6	59.1	67.3	94.0	33.7	56.0	80.5	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kajiado): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
							40th	50th	60th	
<b>Urban</b>	Line	People		87	66	87	129	157	192	316
	Rate	Households	183	0.6	0.3	0.6	5.8	9.2	14.7	35.8
	Rate	People		0.7	0.1	0.7	10.7	14.8	21.7	44.9
<b>Rural</b>	Line	People		74	56	74	109	133	163	267
	Rate	Households	210	17.4	5.8	17.7	35.2	43.7	50.7	75.4
	Rate	People		22.1	9.5	22.5	46.6	56.8	63.4	82.2
<b>All</b>	Line	People		80	61	81	119	145	177	292
	Rate	Households	393	7.7	2.6	7.8	18.2	23.8	29.9	52.5
	Rate	People		11.4	4.8	11.6	28.7	35.8	42.6	63.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kakamega): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		78	168	252	335
	Rate	Households	149	3.0	33.1	55.7	74.0
	Rate	People		5.2	36.5	63.9	81.6
<b>Rural</b>	Line	People		64	107	161	214
	Rate	Households	346	6.4	30.8	64.9	81.8
	Rate	People		7.1	35.8	72.2	85.6
<b>All</b>	Line	People		66	115	172	229
	Rate	Households	495	5.8	31.2	63.4	80.6
	Rate	People		6.9	35.8	71.2	85.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kakamega): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		119	190	237	474	104	175	301	1,187
	Rate	Households	149	25.5	48.1	64.6	88.4	19.0	44.0	72.5	99.2
	Rate	People		33.8	58.7	76.2	95.7	24.5	54.9	84.5	99.8
<b>Rural</b>	Line	People		95	152	190	380	83	140	241	952
	Rate	Households	346	41.4	75.8	86.2	99.5	32.5	72.5	92.7	100.0
	Rate	People		49.0	81.6	89.9	99.9	38.3	78.5	95.2	100.0
<b>All</b>	Line	People		98	157	196	392	86	145	249	981
	Rate	Households	495	38.9	71.4	82.8	97.7	30.3	68.0	89.5	99.9
	Rate	People		47.1	78.8	88.2	99.4	36.6	75.6	93.9	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kakamega): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		75	57	76	112	136	166	274
	Rate	Households	149	5.2	2.1	5.3	19.4	28.2	36.4	65.0
	Rate	People		8.2	4.5	8.3	26.9	38.5	47.7	77.0
<b>Rural</b>	Line	People		63	47	63	93	113	138	228
	Rate	Households	346	15.5	7.6	18.6	46.6	59.8	73.7	91.2
	Rate	People		19.4	9.2	24.2	54.0	67.8	79.9	94.1
<b>All</b>	Line	People		64	48	64	95	116	142	233
	Rate	Households	495	13.9	6.8	16.5	42.3	54.8	67.8	87.1
	Rate	People		18.0	8.6	22.2	50.7	64.2	75.9	92.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Kericho): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		72	137	206	274
	Rate	Households	213	4.4	29.6	60.5	81.7
	Rate	People		6.3	33.0	67.6	86.2
<b>Rural</b>	Line	People		67	112	168	224
	Rate	Households	260	5.9	25.9	58.6	79.2
	Rate	People		7.9	28.9	66.3	86.4
<b>All</b>	Line	People		69	120	180	240
	Rate	Households	473	5.3	27.3	59.3	80.2
	Rate	People		7.3	30.3	66.7	86.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kericho): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		121	193	241	482	106	178	306	1,206
	Rate	Households	213	38.0	64.9	72.4	97.5	28.9	60.7	83.3	100.0
	Rate	People		49.3	75.3	81.0	98.7	38.4	70.4	90.8	100.0
<b>Rural</b>	Line	People		99	159	198	397	87	146	252	992
	Rate	Households	260	35.6	68.5	80.6	98.5	23.3	64.2	88.9	99.8
	Rate	People		42.6	77.1	87.9	99.0	27.2	73.2	94.6	99.9
<b>All</b>	Line	People		106	170	213	425	93	157	270	1,064
	Rate	Households	473	36.5	67.1	77.5	98.2	25.4	62.8	86.8	99.9
	Rate	People		44.8	76.5	85.6	98.9	30.9	72.3	93.3	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kericho): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		77	58	77	113	138	169	278
	Rate	Households	213	7.9	4.4	9.6	25.9	38.2	46.2	68.6
	Rate	People		11.4	6.6	14.1	36.1	49.8	56.5	78.8
<b>Rural</b>	Line	People		65	49	66	97	118	144	237
	Rate	Households	260	10.5	4.9	11.8	34.3	49.3	62.3	84.2
	Rate	People		13.3	7.1	14.9	42.3	58.5	72.3	91.6
<b>All</b>	Line	People		69	52	69	102	125	153	251
	Rate	Households	473	9.5	4.7	11.0	31.1	45.0	56.1	78.2
	Rate	People		12.7	6.9	14.6	40.2	55.6	67.1	87.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kiambu): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		83	192	288	385
	Rate	Households	285	1.0	17.8	47.4	69.5
	Rate	People		1.6	23.7	54.2	76.7
<b>Rural</b>	Line	People		68	113	169	226
	Rate	Households	226	5.2	19.3	45.1	65.5
	Rate	People		6.4	22.5	51.4	74.1
<b>All</b>	Line	People		78	168	252	335
	Rate	Households	511	2.1	18.2	46.7	68.4
	Rate	People		3.1	23.3	53.3	75.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kiambu): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		119	191	238	477	104	176	302	1,193
	Rate	Households	285	10.1	28.7	39.0	83.2	8.1	22.3	57.5	98.5
	Rate	People		16.1	38.7	50.2	88.7	13.6	31.9	67.5	99.2
<b>Rural</b>	Line	People		100	160	200	400	88	148	254	1,001
	Rate	Households	226	22.8	50.9	67.2	95.4	14.8	45.6	80.0	100.0
	Rate	People		28.9	60.1	76.1	97.8	19.6	55.2	88.5	100.0
<b>All</b>	Line	People		113	181	227	453	99	167	287	1,134
	Rate	Households	511	13.6	34.8	46.8	86.5	10.0	28.7	63.7	98.9
	Rate	People		20.1	45.3	58.2	91.5	15.5	39.1	74.0	99.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kiambu): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		76	57	76	112	137	167	275
	Rate	Households	285	1.3	0.0	1.3	9.5	11.7	17.0	40.6
	Rate	People		2.3	0.0	2.3	14.7	17.8	24.6	51.6
<b>Rural</b>	Line	People		66	50	66	98	119	146	239
	Rate	Households	226	7.2	2.9	10.1	21.4	27.8	45.6	72.5
	Rate	People		9.6	4.2	12.7	25.7	34.2	54.1	80.9
<b>All</b>	Line	People		73	55	73	108	131	161	264
	Rate	Households	511	2.9	0.8	3.7	12.8	16.2	24.9	49.3
	Rate	People		4.6	1.3	5.6	18.1	22.9	33.8	60.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kilifi): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		89	209	313	417
	Rate	Households	213	0.2	24.8	52.6	68.6
	Rate	People		0.3	36.2	61.5	74.6
<b>Rural</b>	Line	People		67	111	166	222
	Rate	Households	257	8.0	40.8	61.1	71.9
	Rate	People		10.6	51.9	72.3	83.4
<b>All</b>	Line	People		75	145	217	290
	Rate	Households	470	4.6	33.9	57.4	70.5
	Rate	People		7.0	46.4	68.5	80.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kilifi): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		127	202	253	506	111	187	321	1,266
	Rate	Households	213	12.7	32.0	46.9	83.9	8.8	30.1	58.4	99.6
	Rate	People		25.9	47.0	59.6	91.7	17.3	44.9	68.6	99.9
<b>Rural</b>	Line	People		98	157	197	393	86	145	249	983
	Rate	Households	257	44.5	67.9	73.7	92.9	40.2	65.2	85.3	99.2
	Rate	People		57.0	81.0	85.9	98.1	52.7	77.9	93.3	99.8
<b>All</b>	Line	People		108	173	216	433	95	160	274	1,082
	Rate	Households	470	30.8	52.4	62.2	89.0	26.6	50.0	73.7	99.4
	Rate	People		46.1	69.1	76.7	95.8	40.3	66.4	84.7	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Kilifi): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		80	61	81	119	145	178	292
	Rate	Households	213	0.0	0.0	0.2	6.2	9.8	15.8	43.6
	Rate	People		0.0	0.0	0.3	12.2	18.6	25.9	59.3
<b>Rural</b>	Line	People		65	49	65	96	117	143	235
	Rate	Households	257	17.8	7.8	21.0	45.6	55.7	63.8	80.9
	Rate	People		25.0	11.6	29.9	58.9	70.1	77.3	89.1
<b>All</b>	Line	People		70	53	70	104	127	155	255
	Rate	Households	470	10.1	4.5	12.0	28.6	35.9	43.1	64.8
	Rate	People		16.3	7.5	19.6	42.6	52.1	59.3	78.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kirinyaga): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		72	153	229	306
	Rate	Households	178	0.6	11.1	34.2	60.2
	Rate	People		0.8	12.4	37.6	64.3
<b>Rural</b>	Line	People		63	105	157	209
	Rate	Households	288	1.9	18.1	45.1	61.9
	Rate	People		1.0	21.6	51.8	68.9
<b>All</b>	Line	People		64	113	169	225
	Rate	Households	466	1.6	16.9	43.2	61.6
	Rate	People		0.9	20.0	49.4	68.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kirinyaga): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		110	177	221	442	97	163	280	1,105
	Rate	Households	178	9.0	34.5	48.8	84.0	6.3	30.4	62.3	97.7
	Rate	People		12.9	41.4	55.9	88.7	8.5	37.0	68.0	98.8
<b>Rural</b>	Line	People		93	148	185	371	81	137	235	928
	Rate	Households	288	18.3	49.9	59.9	92.5	13.3	45.3	75.5	99.4
	Rate	People		23.3	59.2	69.2	94.7	17.3	54.7	82.8	99.7
<b>All</b>	Line	People		96	153	191	383	84	141	243	958
	Rate	Households	466	16.6	47.2	58.0	91.0	12.0	42.7	73.2	99.1
	Rate	People		21.6	56.2	66.9	93.7	15.8	51.7	80.3	99.5

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kirinyaga): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		70	53	70	104	127	155	255
	Rate	Households	178	3.2	1.6	3.4	9.6	18.8	26.2	52.2
	Rate	People		4.8	2.3	4.8	12.6	24.1	31.9	60.8
<b>Rural</b>	Line	People		61	46	61	91	110	135	222
	Rate	Households	288	5.3	2.5	6.9	28.1	39.3	48.6	78.8
	Rate	People		7.1	2.7	9.1	35.2	47.2	58.3	85.0
<b>All</b>	Line	People		63	47	63	93	113	138	227
	Rate	Households	466	4.9	2.3	6.3	24.9	35.7	44.7	74.2
	Rate	People		6.7	2.7	8.4	31.4	43.3	53.9	80.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kisii): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		74	148	222	296
	Rate	Households	186	3.7	28.3	59.3	73.5
	Rate	People		5.9	39.0	68.5	82.5
<b>Rural</b>	Line	People		54	90	135	180
	Rate	Households	348	6.3	36.7	68.9	88.0
	Rate	People		7.9	42.4	72.5	90.5
<b>All</b>	Line	People		58	102	153	205
	Rate	Households	534	5.6	34.5	66.4	84.2
	Rate	People		7.5	41.7	71.7	88.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kisii): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		121	194	242	485	106	179	308	1,214
	Rate	Households	186	33.3	59.2	74.3	94.8	26.9	55.7	84.5	99.5
	Rate	People		47.3	72.1	83.6	97.5	40.7	70.0	90.2	99.6
<b>Rural</b>	Line	People		80	128	160	320	70	118	203	801
	Rate	Households	348	44.4	78.0	86.3	99.7	34.0	72.0	95.0	99.9
	Rate	People		50.3	82.3	90.6	99.4	40.2	76.7	96.4	99.9
<b>All</b>	Line	People		89	142	177	355	78	131	225	887
	Rate	Households	534	41.5	73.1	83.1	98.4	32.1	67.7	92.2	99.8
	Rate	People		49.7	80.1	89.1	99.0	40.3	75.3	95.1	99.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kisii): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		77	58	77	114	139	170	280
	Rate	Households	186	9.8	4.2	10.5	26.0	31.8	38.4	67.0
	Rate	People		14.6	6.9	15.7	40.4	47.5	53.1	77.9
<b>Rural</b>	Line	People		53	40	53	78	95	116	192
	Rate	Households	348	39.8	26.2	43.0	71.3	80.6	88.8	97.2
	Rate	People		46.4	31.7	49.1	78.1	86.0	91.5	97.0
<b>All</b>	Line	People		58	44	58	86	105	128	210
	Rate	Households	534	31.9	20.4	34.4	59.3	67.7	75.4	89.2
	Rate	People		39.8	26.5	42.1	70.2	78.0	83.4	93.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kisumu): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		82	172	258	344
	Rate	Households	270	2.2	23.4	47.4	71.0
	Rate	People		3.4	30.8	57.4	79.3
<b>Rural</b>	Line	People		73	121	182	242
	Rate	Households	232	8.0	32.2	63.4	79.4
	Rate	People		9.4	37.9	69.7	84.8
<b>All</b>	Line	People		78	150	225	299
	Rate	Households	502	4.6	27.0	53.9	74.4
	Rate	People		6.0	33.9	62.8	81.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Kisumu): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		129	207	258	516	113	191	328	1,292
	Rate	Households	270	24.9	51.6	60.9	89.1	16.7	46.9	72.0	99.4
	Rate	People		33.5	64.1	75.0	95.2	23.6	59.1	82.8	99.5
<b>Rural</b>	Line	People		107	172	215	430	94	159	272	1,075
	Rate	Households	232	38.2	69.6	80.8	97.7	32.9	66.3	89.5	100.0
	Rate	People		46.6	77.4	87.2	98.9	40.9	74.7	93.7	100.0
<b>All</b>	Line	People		120	191	239	478	105	176	303	1,197
	Rate	Households	502	30.3	58.9	69.0	92.6	23.2	54.8	79.1	99.6
	Rate	People		39.3	70.0	80.4	96.8	31.2	66.0	87.6	99.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kisumu): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		82	62	82	122	148	181	298
	Rate	Households	270	0.9	0.5	1.3	8.9	15.7	25.9	54.2
	Rate	People		1.6	0.8	2.1	13.6	23.0	35.4	66.7
<b>Rural</b>	Line	People		71	53	71	105	128	156	257
	Rate	Households	232	8.8	3.5	9.8	26.3	40.6	50.8	82.1
	Rate	People		11.6	4.8	12.6	33.7	49.7	61.6	88.6
<b>All</b>	Line	People		77	58	77	114	139	170	280
	Rate	Households	502	4.1	1.7	4.7	15.9	25.8	36.0	65.5
	Rate	People		6.0	2.6	6.7	22.4	34.7	46.9	76.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kitui): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		76	143	215	286
	Rate	Households	136	6.0	22.5	42.4	67.3
	Rate	People		8.7	24.2	43.3	69.7
<b>Rural</b>	Line	People		65	108	163	217
	Rate	Households	325	11.9	44.4	67.8	83.6
	Rate	People		13.6	52.0	76.1	90.0
<b>All</b>	Line	People		67	114	171	228
	Rate	Households	461	10.6	39.6	62.2	80.0
	Rate	People		12.8	47.7	70.9	86.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kitui): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		130	207	259	519	114	191	329	1,298
	Rate	Households	136	22.6	49.7	60.2	87.5	16.4	45.1	74.2	99.5
	Rate	People		32.4	60.5	76.3	95.2	23.9	53.6	86.3	99.8
<b>Rural</b>	Line	People		96	154	192	385	84	142	244	962
	Rate	Households	325	48.4	75.9	85.4	96.8	39.0	72.3	92.0	99.8
	Rate	People		58.0	83.8	93.1	98.6	47.6	81.0	96.3	100.0
<b>All</b>	Line	People		101	162	203	406	89	150	257	1,015
	Rate	Households	461	42.7	70.1	79.8	94.8	34.0	66.2	88.1	99.7
	Rate	People		54.0	80.2	90.5	98.1	43.9	76.7	94.8	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kitui): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		82	62	83	122	149	182	299
	Rate	Households	136	6.4	3.4	7.2	11.8	15.7	27.1	53.8
	Rate	People		10.6	6.3	11.5	18.0	22.7	35.3	62.8
<b>Rural</b>	Line	People		63	48	64	94	115	140	230
	Rate	Households	325	27.3	14.6	28.9	49.3	61.4	72.5	88.5
	Rate	People		33.7	18.3	35.5	60.1	71.2	82.1	94.5
<b>All</b>	Line	People		66	50	67	98	120	146	241
	Rate	Households	461	22.6	12.1	24.1	41.0	51.2	62.4	80.8
	Rate	People		30.1	16.4	31.8	53.6	63.6	74.8	89.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kwale): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		82	174	261	348
	Rate	Households	168	0.2	31.0	54.7	71.2
	Rate	People		0.2	45.8	68.6	82.0
<b>Rural</b>	Line	People		68	114	171	227
	Rate	Households	298	5.2	36.7	60.6	72.5
	Rate	People		7.8	48.0	72.3	82.1
<b>All</b>	Line	People		72	129	193	258
	Rate	Households	466	3.7	35.0	58.9	72.2
	Rate	People		5.9	47.4	71.4	82.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kwale): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		127	204	255	510	112	188	323	1,276
	Rate	Households	168	25.8	43.3	62.9	85.5	18.2	39.8	72.7	99.1
	Rate	People		41.5	63.0	82.1	94.9	31.2	57.7	87.9	99.8
<b>Rural</b>	Line	People		101	161	202	404	88	149	256	1,010
	Rate	Households	298	45.9	67.9	76.0	93.6	35.2	65.0	85.1	100.0
	Rate	People		59.6	79.4	86.2	98.0	46.9	76.9	92.7	100.0
<b>All</b>	Line	People		108	172	215	430	94	159	273	1,076
	Rate	Households	466	40.0	60.7	72.2	91.2	30.3	57.7	81.5	99.7
	Rate	People		55.1	75.3	85.1	97.2	42.9	72.1	91.5	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Kwale): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		81	61	81	120	146	179	294
	Rate	Households	168	3.5	0.5	4.3	11.7	20.7	29.9	52.7
	Rate	People		6.3	1.2	7.5	21.8	34.7	47.1	73.3
<b>Rural</b>	Line	People		67	50	67	98	120	147	241
	Rate	Households	298	16.0	5.7	16.8	38.4	51.1	60.7	75.7
	Rate	People		22.3	6.9	23.5	51.2	65.8	74.8	88.1
<b>All</b>	Line	People		70	53	70	104	127	155	255
	Rate	Households	466	12.4	4.2	13.1	30.6	42.2	51.8	69.0
	Rate	People		18.3	5.5	19.5	43.9	58.0	67.9	84.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Laikipia): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		77	181	272	362
	Rate	Households	172	0.5	22.5	49.3	67.9
	Rate	People		0.8	31.7	56.2	74.6
<b>Rural</b>	Line	People		63	105	157	210
	Rate	Households	290	12.5	41.5	64.1	75.9
	Rate	People		17.8	48.7	71.0	82.1
<b>All</b>	Line	People		65	117	176	235
	Rate	Households	462	9.8	37.1	60.7	74.1
	Rate	People		15.0	45.9	68.5	80.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Laikipia): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		108	173	217	433	95	160	275	1,084
	Rate	Households	172	8.3	27.8	42.5	81.9	3.9	25.2	56.9	100.0
	Rate	People		12.9	39.2	53.5	88.6	5.6	35.8	66.7	100.0
<b>Rural</b>	Line	People		93	149	186	372	82	137	236	931
	Rate	Households	290	44.7	71.2	78.4	96.0	36.6	65.9	86.3	100.0
	Rate	People		53.3	79.4	86.1	98.2	46.3	75.6	90.9	100.0
<b>All</b>	Line	People		96	153	191	382	84	141	242	956
	Rate	Households	462	36.2	61.1	70.1	92.7	29.0	56.4	79.5	100.0
	Rate	People		46.7	72.8	80.7	96.6	39.6	69.1	87.0	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Laikipia): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		69	52	69	102	124	152	250
	Rate	Households	172	2.5	0.9	2.8	11.1	17.8	25.2	52.7
	Rate	People		3.6	1.6	4.1	16.7	27.8	36.9	62.8
<b>Rural</b>	Line	People		61	46	62	91	111	135	223
	Rate	Households	290	26.4	12.4	28.8	51.5	63.5	73.9	87.5
	Rate	People		35.0	17.8	37.1	61.9	74.6	82.2	92.2
<b>All</b>	Line	People		63	47	63	93	113	138	227
	Rate	Households	462	20.9	9.7	22.8	42.1	52.9	62.5	79.4
	Rate	People		29.8	15.2	31.7	54.5	66.9	74.8	87.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Lamu): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		88	189	284	379
	Rate	Households	184	1.8	15.7	45.0	63.2
	Rate	People		1.1	21.6	57.4	76.1
<b>Rural</b>	Line	People		68	113	169	225
	Rate	Households	233	2.1	22.5	43.4	60.5
	Rate	People		3.7	30.1	52.4	69.4
<b>All</b>	Line	People		71	127	191	254
	Rate	Households	417	2.0	21.0	43.7	61.0
	Rate	People		3.2	28.5	53.4	70.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Lamu): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		134	214	268	536	117	198	340	1,341
	Rate	Households	184	17.1	34.5	50.2	82.1	12.4	32.4	66.9	98.9
	Rate	People		22.9	47.9	64.6	93.0	15.8	44.9	82.0	99.7
<b>Rural</b>	Line	People		100	160	200	400	88	147	253	1,000
	Rate	Households	233	24.8	51.5	63.6	89.8	18.5	48.4	77.4	99.4
	Rate	People		34.9	62.9	75.8	96.3	27.6	59.5	86.0	99.9
<b>All</b>	Line	People		106	170	213	426	93	157	270	1,065
	Rate	Households	417	23.1	47.9	60.8	88.2	17.2	45.0	75.2	99.3
	Rate	People		32.6	60.1	73.6	95.7	25.3	56.7	85.2	99.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Lamu): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
<b>Urban</b>	Line	People		85	64	85	126	154	188	309
	Rate	Households	184	1.2	1.2	1.2	4.4	9.0	15.5	35.8
	Rate	People		0.3	0.3	0.3	4.7	10.9	22.5	48.1
<b>Rural</b>	Line	People		66	50	66	97	119	145	239
	Rate	Households	233	6.7	2.3	7.6	24.0	35.6	43.3	69.8
	Rate	People		10.8	3.9	12.5	34.2	45.9	53.9	81.0
<b>All</b>	Line	People		70	52	70	103	126	153	252
	Rate	Households	417	5.5	2.1	6.2	19.8	29.9	37.4	62.6
	Rate	People		8.8	3.3	10.2	28.6	39.2	47.9	74.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Machakos): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		77	157	236	315
	Rate	Households	253	2.5	16.9	38.1	60.1
	Rate	People		3.4	22.3	46.3	62.8
<b>Rural</b>	Line	People		68	113	169	226
	Rate	Households	230	4.0	21.0	44.7	69.9
	Rate	People		4.2	24.9	50.9	76.5
<b>All</b>	Line	People		74	140	210	281
	Rate	Households	483	3.0	18.2	40.2	63.3
	Rate	People		3.7	23.3	48.0	68.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Machakos): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		124	198	247	494	108	182	314	1,237
	Rate	Households	253	19.0	32.5	50.1	86.9	13.7	29.2	59.0	99.1
	Rate	People		30.2	46.9	62.1	94.0	21.6	43.5	69.5	99.6
<b>Rural</b>	Line	People		100	160	200	401	88	148	254	1,003
	Rate	Households	230	27.3	59.2	74.8	95.6	19.8	48.0	88.0	99.6
	Rate	People		32.9	66.2	81.3	97.5	24.1	54.2	92.5	99.9
<b>All</b>	Line	People		115	183	229	458	100	169	291	1,147
	Rate	Households	483	21.7	41.1	58.1	89.8	15.7	35.3	68.4	99.2
	Rate	People		31.3	54.3	69.5	95.4	22.6	47.6	78.3	99.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Machakos): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		79	59	79	116	142	173	285
	Rate	Households	253	2.9	1.1	3.5	10.7	18.8	23.8	46.2
	Rate	People		4.8	1.6	5.6	15.7	26.2	33.6	58.6
<b>Rural</b>	Line	People		66	50	66	98	119	146	240
	Rate	Households	230	7.2	2.6	9.3	24.8	35.0	44.1	82.7
	Rate	People		7.5	2.4	10.3	28.6	40.7	50.3	88.0
<b>All</b>	Line	People		74	56	74	109	133	163	268
	Rate	Households	483	4.3	1.6	5.4	15.3	24.1	30.4	58.0
	Rate	People		5.8	1.9	7.4	20.7	31.8	40.0	69.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Makueni): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		78	155	233	310
	Rate	Households	150	4.1	17.2	45.4	60.3
	Rate	People		5.9	21.0	56.6	71.5
<b>Rural</b>	Line	People		68	113	169	226
	Rate	Households	344	5.3	30.0	53.9	72.0
	Rate	People		6.7	37.1	62.1	80.0
<b>All</b>	Line	People		69	119	178	238
	Rate	Households	494	5.1	27.6	52.3	69.8
	Rate	People		6.6	34.8	61.4	78.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Makueni): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		127	203	254	508	111	187	322	1,271
	Rate	Households	150	21.8	46.0	54.1	86.3	12.9	42.2	60.8	99.4
	Rate	People		32.4	61.3	70.1	94.4	20.1	57.7	76.4	99.8
<b>Rural</b>	Line	People		100	160	200	401	88	148	254	1,003
	Rate	Households	344	36.3	61.6	74.1	97.4	29.1	55.9	83.1	100.0
	Rate	People		45.1	70.4	83.4	99.0	36.9	65.2	91.5	100.0
<b>All</b>	Line	People		104	166	208	416	91	153	264	1,040
	Rate	Households	494	33.6	58.7	70.4	95.3	26.1	53.3	78.9	99.9
	Rate	People		43.4	69.1	81.6	98.4	34.6	64.2	89.4	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Makueni): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		81	61	81	120	146	178	293
	Rate	Households	150	2.4	0.6	2.4	8.8	14.4	23.2	48.9
	Rate	People		4.4	1.2	4.4	15.1	26.1	37.8	66.0
<b>Rural</b>	Line	People		66	50	66	98	119	146	240
	Rate	Households	344	13.2	5.6	14.1	33.4	42.5	55.6	78.6
	Rate	People		17.0	7.3	18.0	41.8	50.6	64.2	87.0
<b>All</b>	Line	People		68	51	68	101	123	150	247
	Rate	Households	494	11.2	4.6	11.9	28.8	37.3	49.5	73.0
	Rate	People		15.3	6.5	16.1	38.1	47.2	60.6	84.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Mandera): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		95	216	323	431
	Rate	Households	140	12.5	61.5	81.1	91.8
	Rate	People		15.8	70.0	89.5	94.5
<b>Rural</b>	Line	People		69	115	173	231
	Rate	Households	281	42.0	77.9	94.4	98.2
	Rate	People		49.2	81.0	95.9	99.1
<b>All</b>	Line	People		77	146	219	292
	Rate	Households	421	33.0	72.9	90.4	96.3
	Rate	People		38.9	77.6	94.0	97.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Mandera): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		138	220	275	550	121	203	349	1,377
	Rate	Households	140	48.7	79.3	87.5	97.1	36.2	72.8	89.6	100.0
	Rate	People		60.2	88.5	95.1	98.8	44.7	82.9	95.7	100.0
<b>Rural</b>	Line	People		102	164	205	409	90	151	260	1,024
	Rate	Households	281	90.1	98.9	98.9	99.6	81.6	97.5	99.1	100.0
	Rate	People		92.8	99.8	99.8	99.9	85.7	98.7	99.8	100.0
<b>All</b>	Line	People		113	181	226	453	99	167	287	1,132
	Rate	Households	421	77.6	93.0	95.5	98.9	67.8	90.0	96.2	100.0
	Rate	People		82.8	96.3	98.3	99.6	73.1	93.8	98.5	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Mandera): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
<b>Urban</b>	Line	People		88	66	88	129	158	193	317
	Rate	Households	140	8.5	6.3	9.1	21.6	30.3	44.4	73.6
	Rate	People		11.3	9.0	11.7	25.0	35.8	53.0	84.9
<b>Rural</b>	Line	People		68	51	68	100	122	149	245
	Rate	Households	281	61.6	43.0	62.9	81.1	89.8	94.7	98.9
	Rate	People		66.2	47.2	67.1	83.9	91.2	95.7	99.8
<b>All</b>	Line	People		74	55	74	109	133	162	267
	Rate	Households	421	45.5	31.9	46.6	63.0	71.8	79.5	91.2
	Rate	People		49.3	35.5	50.2	65.9	74.2	82.6	95.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Marsabit): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		94	214	322	429
	Rate	Households	128	4.4	42.8	75.0	87.7
	Rate	People		5.9	51.6	85.4	94.8
<b>Rural</b>	Line	People		76	126	189	252
	Rate	Households	219	25.9	60.3	84.5	90.4
	Rate	People		30.3	68.0	89.4	95.1
<b>All</b>	Line	People		81	150	224	299
	Rate	Households	347	20.4	55.8	82.1	89.7
	Rate	People		23.8	63.7	88.4	95.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Marsabit): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		136	218	273	545	119	201	346	1,364
	Rate	Households	128	33.5	69.0	73.3	94.4	27.4	60.4	81.2	98.9
	Rate	People		44.0	82.2	85.7	98.4	38.3	74.4	92.3	99.8
<b>Rural</b>	Line	People		112	179	224	448	98	165	284	1,120
	Rate	Households	219	71.3	88.5	91.8	96.8	62.1	85.2	94.3	100.0
	Rate	People		79.2	93.5	96.3	99.2	71.0	90.9	98.3	100.0
<b>All</b>	Line	People		118	189	237	474	104	175	300	1,185
	Rate	Households	347	61.6	83.5	87.1	96.2	53.2	78.8	91.0	99.7
	Rate	People		69.9	90.5	93.5	99.0	62.4	86.5	96.7	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Marsabit): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		87	65	87	128	157	191	314
	Rate	Households	128	3.8	1.5	3.8	16.2	26.9	36.9	63.8
	Rate	People		5.3	1.8	5.3	21.1	36.9	47.0	75.4
<b>Rural</b>	Line	People		74	56	74	109	133	163	268
	Rate	Households	219	24.9	13.5	28.2	57.4	70.1	81.7	91.8
	Rate	People		30.6	15.6	34.4	65.7	77.7	88.3	96.2
<b>All</b>	Line	People		77	58	77	114	140	170	280
	Rate	Households	347	19.5	10.4	21.9	46.8	59.0	70.2	84.6
	Rate	People		23.9	11.9	26.7	53.9	66.9	77.4	90.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Meru): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		79	179	269	358
	Rate	Households	141	1.3	19.1	33.7	54.6
	Rate	People		4.0	27.3	43.0	66.0
<b>Rural</b>	Line	People		62	103	154	206
	Rate	Households	393	3.0	16.0	44.4	61.2
	Rate	People		2.7	18.7	54.2	70.6
<b>All</b>	Line	People		63	109	164	218
	Rate	Households	534	2.8	16.3	43.1	60.4
	Rate	People		2.8	19.4	53.2	70.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Meru): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		115	185	231	461	101	170	293	1,155
	Rate	Households	141	6.0	21.7	34.5	79.7	5.3	18.6	50.3	97.5
	Rate	People		12.6	36.9	49.4	89.4	11.8	32.8	66.2	99.0
<b>Rural</b>	Line	People		91	146	182	365	80	135	231	913
	Rate	Households	393	18.5	50.1	65.2	93.2	13.5	45.8	76.8	99.3
	Rate	People		22.2	61.3	75.1	96.8	15.9	56.8	84.7	99.8
<b>All</b>	Line	People		93	149	187	373	82	138	237	933
	Rate	Households	534	17.0	46.6	61.5	91.5	12.5	42.4	73.6	99.1
	Rate	People		21.4	59.3	73.0	96.2	15.6	54.8	83.1	99.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Meru): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		73	55	74	109	133	162	266
	Rate	Households	141	2.9	1.3	2.9	5.5	11.2	15.5	39.8
	Rate	People		5.9	4.0	5.9	11.7	19.1	27.2	54.8
<b>Rural</b>	Line	People		60	45	60	89	109	133	218
	Rate	Households	393	10.5	4.9	11.5	31.4	43.6	54.2	78.4
	Rate	People		14.0	5.7	15.2	39.6	52.3	63.9	86.4
<b>All</b>	Line	People		61	46	61	91	111	135	222
	Rate	Households	534	9.5	4.5	10.4	28.2	39.6	49.4	73.6
	Rate	People		13.4	5.5	14.5	37.3	49.5	60.8	83.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Migori): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		79	167	250	333
	Rate	Households	178	2.1	29.8	60.9	79.7
	Rate	People		3.0	40.0	71.8	87.3
<b>Rural</b>	Line	People		65	107	161	215
	Rate	Households	295	5.1	35.3	71.2	86.5
	Rate	People		3.6	41.4	75.8	90.7
<b>All</b>	Line	People		67	116	174	232
	Rate	Households	473	4.5	34.3	69.3	85.2
	Rate	People		3.6	41.2	75.2	90.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Migori): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		123	197	246	493	108	182	312	1,233
	Rate	Households	178	24.3	51.8	64.4	93.4	15.6	48.3	77.9	100.0
	Rate	People		35.5	65.7	77.6	97.8	23.8	62.9	89.0	100.0
<b>Rural</b>	Line	People		95	153	191	381	84	141	242	954
	Rate	Households	295	46.8	81.5	90.4	96.7	37.5	76.5	94.1	100.0
	Rate	People		55.6	88.3	94.7	98.6	44.3	83.3	97.7	100.0
<b>All</b>	Line	People		99	159	199	397	87	146	252	993
	Rate	Households	473	42.7	76.0	85.6	96.1	33.4	71.3	91.1	100.0
	Rate	People		52.8	85.1	92.3	98.5	41.4	80.5	96.5	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Migori): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
<b>Urban</b>	Line	People		78	59	79	116	141	173	284
	Rate	Households	178	2.8	1.6	3.8	15.7	25.7	34.6	58.9
	Rate	People		3.9	2.1	5.2	23.0	39.1	48.7	72.4
<b>Rural</b>	Line	People		63	47	63	93	114	139	228
	Rate	Households	295	14.5	5.6	18.2	53.0	66.0	77.5	94.5
	Rate	People		17.1	5.3	22.2	60.6	74.3	84.2	97.7
<b>All</b>	Line	People		65	49	65	96	118	144	236
	Rate	Households	473	12.3	4.9	15.5	46.1	58.5	69.5	87.9
	Rate	People		15.3	4.9	19.8	55.3	69.4	79.2	94.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Murang'a): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		69	136	203	271
	Rate	Households	148	2.5	13.6	41.9	59.5
	Rate	People		3.1	18.3	48.1	62.8
<b>Rural</b>	Line	People		63	104	157	209
	Rate	Households	337	3.9	21.0	47.2	68.7
	Rate	People		5.5	26.4	55.0	76.2
<b>All</b>	Line	People		64	109	164	218
	Rate	Households	485	3.6	19.7	46.2	67.1
	Rate	People		5.2	25.3	54.0	74.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Murang'a): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		115	183	229	458	100	169	291	1,146
	Rate	Households	148	17.5	39.4	56.8	89.3	11.6	35.0	72.2	100.0
	Rate	People		25.4	54.9	71.8	95.7	18.2	49.2	84.0	100.0
<b>Rural</b>	Line	People		93	148	185	371	81	137	235	927
	Rate	Households	337	24.6	56.5	68.7	93.3	18.5	51.2	80.6	100.0
	Rate	People		32.0	66.6	77.7	95.9	25.7	62.3	87.4	100.0
<b>All</b>	Line	People		96	153	192	383	84	141	243	959
	Rate	Households	485	23.3	53.5	66.6	92.6	17.3	48.3	79.1	100.0
	Rate	People		31.1	64.9	76.9	95.9	24.6	60.4	86.9	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Murang'a): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		73	55	73	108	132	161	264
	Rate	Households	148	2.2	1.8	2.2	13.5	21.4	31.2	60.1
	Rate	People		5.2	4.8	5.2	20.0	30.4	45.7	76.0
<b>Rural</b>	Line	People		61	46	61	90	110	135	222
	Rate	Households	337	10.1	4.8	11.9	34.1	45.7	58.5	80.3
	Rate	People		14.8	6.9	16.7	43.0	55.5	68.7	87.5
<b>All</b>	Line	People		63	47	63	93	113	139	228
	Rate	Households	485	8.7	4.3	10.2	30.4	41.3	53.7	76.7
	Rate	People		13.4	6.6	15.0	39.6	51.8	65.3	85.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nakuru): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
					100%	150%	200%
<b>Urban</b>	Line	People		80	184	277	369
	Rate	Households	240	2.1	20.5	46.2	66.2
	Rate	People		3.7	28.0	54.1	74.2
<b>Rural</b>	Line	People		58	97	146	195
	Rate	Households	253	2.6	21.9	46.5	71.1
	Rate	People		3.7	30.0	56.9	81.2
<b>All</b>	Line	People		68	135	203	270
	Rate	Households	493	2.4	21.2	46.3	68.7
	Rate	People		3.7	29.1	55.7	78.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nakuru): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		115	183	229	459	100	169	291	1,147
	Rate	Households	240	13.2	31.1	45.5	80.1	8.1	26.4	61.9	98.1
	Rate	People		20.0	43.8	60.0	87.7	14.8	35.8	73.9	99.4
<b>Rural</b>	Line	People		86	138	173	345	76	127	219	864
	Rate	Households	253	27.7	61.7	75.8	93.9	19.7	56.5	83.2	98.8
	Rate	People		39.1	76.3	88.2	97.6	28.8	70.7	92.3	99.7
<b>All</b>	Line	People		99	158	197	394	86	146	250	987
	Rate	Households	493	20.5	46.5	60.8	87.1	14.0	41.6	72.7	98.5
	Rate	People		30.8	62.2	76.0	93.3	22.7	55.6	84.3	99.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nakuru): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		73	55	73	108	132	161	264
	Rate	Households	240	4.9	1.9	4.9	10.1	16.6	23.6	51.4
	Rate	People		7.9	3.8	7.9	15.5	24.3	32.6	64.0
<b>Rural</b>	Line	People		57	43	57	84	103	126	207
	Rate	Households	253	21.0	12.7	24.5	43.6	53.7	66.5	85.3
	Rate	People		31.4	21.3	35.9	58.2	67.9	80.1	92.9
<b>All</b>	Line	People		64	48	64	95	115	141	232
	Rate	Households	493	13.0	7.4	14.8	27.0	35.4	45.3	68.5
	Rate	People		21.2	13.7	23.7	39.7	49.0	59.5	80.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nandi): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		71	133	200	266
	Rate	Households	142	4.4	21.9	49.2	67.4
	Rate	People		5.6	28.4	57.2	75.8
<b>Rural</b>	Line	People		62	104	155	207
	Rate	Households	344	7.1	32.3	59.7	81.8
	Rate	People		8.4	37.2	64.9	85.6
<b>All</b>	Line	People		63	108	161	215
	Rate	Households	486	6.6	30.5	57.8	79.2
	Rate	People		8.0	36.0	63.8	84.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nandi): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		120	192	240	480	105	177	304	1,201
	Rate	Households	142	33.2	59.7	73.9	90.2	23.1	53.8	80.8	99.4
	Rate	People		42.0	71.8	83.3	94.8	30.5	66.8	89.0	99.8
<b>Rural</b>	Line	People		92	147	184	368	81	136	233	920
	Rate	Households	344	38.3	70.2	85.3	98.4	31.2	64.2	94.2	100.0
	Rate	People		44.0	75.9	89.1	99.3	36.4	70.5	96.6	100.0
<b>All</b>	Line	People		96	153	191	383	84	141	243	958
	Rate	Households	486	37.4	68.3	83.3	96.9	29.8	62.3	91.8	99.9
	Rate	People		43.8	75.4	88.4	98.7	35.6	70.0	95.6	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Nandi): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		76	58	77	113	138	168	277
	Rate	Households	142	8.9	5.0	10.9	22.0	29.0	40.2	71.2
	Rate	People		13.0	6.2	16.0	29.3	36.2	49.1	81.3
<b>Rural</b>	Line	People		61	46	61	90	110	134	220
	Rate	Households	344	19.9	12.9	22.3	47.7	59.9	74.0	92.5
	Rate	People		24.0	15.8	26.7	53.5	66.3	79.9	94.9
<b>All</b>	Line	People		63	47	63	93	113	138	228
	Rate	Households	486	17.9	11.5	20.2	43.1	54.3	67.9	88.7
	Rate	People		22.5	14.5	25.2	50.2	62.2	75.7	93.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Narok): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		85	200	300	400
	Rate	Households	109	0.1	17.1	35.0	53.9
	Rate	People		0.3	26.1	49.8	63.8
<b>Rural</b>	Line	People		63	105	157	210
	Rate	Households	348	4.0	16.9	33.8	56.1
	Rate	People		6.2	22.1	41.3	63.5
<b>All</b>	Line	People		65	115	173	231
	Rate	Households	457	3.3	16.9	34.0	55.7
	Rate	People		5.5	22.6	42.2	63.5

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Narok): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		120	191	239	478	105	176	303	1,197
	Rate	Households	109	7.4	25.6	34.6	73.9	4.5	22.8	41.4	95.6
	Rate	People		11.4	38.9	49.6	82.0	6.8	36.2	57.5	97.9
<b>Rural</b>	Line	People		93	149	186	372	82	137	236	931
	Rate	Households	348	25.6	49.9	67.6	89.6	19.5	45.8	78.9	99.5
	Rate	People		33.5	58.7	78.1	96.1	25.6	54.4	88.4	99.8
<b>All</b>	Line	People		96	154	192	384	84	142	243	960
	Rate	Households	457	22.6	45.9	62.1	87.0	17.0	42.0	72.6	98.8
	Rate	People		31.1	56.5	75.0	94.5	23.5	52.4	85.1	99.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Narok): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		76	57	76	113	137	168	276
	Rate	Households	109	0.8	0.1	0.9	5.7	8.6	19.0	38.3
	Rate	People		1.5	0.3	1.9	9.4	15.1	29.9	51.1
<b>Rural</b>	Line	People		61	46	62	91	111	135	223
	Rate	Households	348	14.7	6.4	16.8	30.0	40.5	53.3	75.3
	Rate	People		20.5	9.6	22.6	38.8	50.8	64.3	84.8
<b>All</b>	Line	People		63	47	63	93	114	139	228
	Rate	Households	457	12.4	5.4	14.1	26.0	35.2	47.6	69.1
	Rate	People		18.4	8.6	20.4	35.6	47.0	60.5	81.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyamira): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		74	150	225	300
	Rate	Households	148	4.3	19.6	49.8	79.1
	Rate	People		5.2	26.1	59.8	80.2
<b>Rural</b>	Line	People		64	107	161	214
	Rate	Households	341	6.3	30.8	56.8	74.1
	Rate	People		8.0	33.9	61.0	79.3
<b>All</b>	Line	People		66	114	171	228
	Rate	Households	489	6.0	28.7	55.5	75.0
	Rate	People		7.6	32.7	60.8	79.5

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyamira): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		118	188	236	471	103	174	299	1,179
	Rate	Households	148	25.3	46.3	56.5	94.8	18.1	41.2	70.8	98.7
	Rate	People		33.6	60.9	72.5	97.2	25.1	54.6	84.5	99.6
<b>Rural</b>	Line	People		95	152	190	380	83	140	241	952
	Rate	Households	341	37.7	67.7	79.2	96.3	28.1	59.7	87.8	100.0
	Rate	People		44.2	73.8	85.0	98.9	32.8	65.6	92.1	100.0
<b>All</b>	Line	People		99	158	197	394	86	146	250	987
	Rate	Households	489	35.4	63.7	75.0	96.0	26.2	56.2	84.6	99.8
	Rate	People		42.5	71.8	83.0	98.6	31.6	63.9	90.9	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyamira): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	n	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
							40th	50th	60th	
<b>Urban</b>	Line	People		75	56	75	111	135	165	272
	Rate	Households	148	8.3	7.3	8.3	19.8	29.8	37.6	59.9
	Rate	People		12.8	10.9	12.8	26.6	40.3	51.9	74.2
<b>Rural</b>	Line	People		63	47	63	93	113	138	227
	Rate	Households	341	14.8	6.5	17.1	37.4	51.1	64.5	86.8
	Rate	People		20.5	9.3	23.2	46.5	59.6	72.6	92.9
<b>All</b>	Line	People		65	49	65	96	117	143	234
	Rate	Households	489	13.6	6.6	15.5	34.1	47.1	59.5	81.8
	Rate	People		19.3	9.6	21.6	43.4	56.6	69.4	90.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyandarua): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		69	133	199	266
	Rate	Households	149	2.8	26.4	50.0	70.0
	Rate	People		3.4	32.5	57.3	75.4
<b>Rural</b>	Line	People		61	102	152	203
	Rate	Households	299	1.9	23.4	44.3	61.2
	Rate	People		3.4	35.3	60.5	75.6
<b>All</b>	Line	People		62	107	161	214
	Rate	Households	448	2.1	24.0	45.4	63.0
	Rate	People		3.4	34.8	59.9	75.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Nyandarua): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		115	184	230	459	101	169	291	1,149
	Rate	Households	149	30.7	56.6	73.7	96.2	23.8	50.9	83.4	100.0
	Rate	People		40.4	68.7	84.1	98.8	33.4	63.3	90.8	100.0
<b>Rural</b>	Line	People		90	144	180	360	79	133	228	901
	Rate	Households	299	26.4	49.7	62.4	92.5	17.4	46.3	74.2	100.0
	Rate	People		42.4	67.5	78.1	97.1	28.8	64.3	87.1	100.0
<b>All</b>	Line	People		94	151	189	378	83	139	240	945
	Rate	Households	448	27.2	51.1	64.6	93.2	18.7	47.2	76.1	100.0
	Rate	People		42.0	67.7	79.2	97.4	29.6	64.2	87.8	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyandarua): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		73	55	73	108	132	161	265
	Rate	Households	149	5.3	1.7	5.7	24.4	32.8	46.2	75.2
	Rate	People		6.7	1.6	7.8	31.0	41.4	58.2	84.6
<b>Rural</b>	Line	People		59	45	60	88	107	131	215
	Rate	Households	299	14.0	7.3	15.1	35.2	44.6	56.1	77.5
	Rate	People		22.1	13.1	23.8	52.0	62.4	71.8	87.5
<b>All</b>	Line	People		62	47	62	91	112	136	224
	Rate	Households	448	12.2	6.2	13.2	33.1	42.3	54.1	77.0
	Rate	People		19.4	11.1	21.0	48.3	58.7	69.4	87.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyeri): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		69	142	213	284
	Rate	Households	191	0.4	15.7	30.9	45.6
	Rate	People		0.6	22.7	40.2	55.1
<b>Rural</b>	Line	People		60	100	151	201
	Rate	Households	311	0.0	11.5	28.0	41.4
	Rate	People		0.0	17.7	39.1	52.4
<b>All</b>	Line	People		63	113	170	227
	Rate	Households	502	0.1	13.0	29.0	42.9
	Rate	People		0.2	19.3	39.4	53.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyeri): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		109	175	218	437	96	161	277	1,093
	Rate	Households	191	9.4	26.5	38.9	78.2	7.1	24.8	51.6	100.0
	Rate	People		17.3	38.6	50.9	87.4	13.4	36.9	65.1	100.0
<b>Rural</b>	Line	People		89	142	178	356	78	131	226	891
	Rate	Households	311	12.0	33.9	47.0	88.3	5.5	28.5	59.7	100.0
	Rate	People		19.5	46.1	61.5	93.8	9.6	40.7	72.7	100.0
<b>All</b>	Line	People		95	153	191	381	84	141	242	954
	Rate	Households	502	11.1	31.3	44.1	84.7	6.1	27.2	56.8	100.0
	Rate	People		18.8	43.7	58.2	91.8	10.8	39.5	70.3	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Nyeri): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		69	52	70	103	125	153	252
	Rate	Households	191	1.3	0.4	1.8	11.4	17.7	25.3	50.2
	Rate	People		1.7	0.6	2.5	19.0	26.8	36.4	62.3
<b>Rural</b>	Line	People		59	44	59	87	106	130	213
	Rate	Households	311	2.0	0.0	4.1	17.8	30.2	43.4	69.0
	Rate	People		4.4	0.0	8.5	27.8	42.6	57.5	79.9
<b>All</b>	Line	People		62	47	62	92	112	137	225
	Rate	Households	502	1.8	0.1	3.3	15.5	25.8	37.0	62.3
	Rate	People		3.5	0.2	6.6	25.0	37.6	50.9	74.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Samburu): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		90	200	300	400
	Rate	Households	152	8.9	34.3	60.3	76.3
	Rate	People		15.7	48.5	74.7	86.9
<b>Rural</b>	Line	People		71	119	178	237
	Rate	Households	269	38.3	73.9	91.9	94.2
	Rate	People		48.2	82.3	96.1	97.3
<b>All</b>	Line	People		75	134	200	267
	Rate	Households	421	30.6	63.5	83.6	89.5
	Rate	People		42.2	76.1	92.1	95.4

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Samburu): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		133	212	266	531	116	196	337	1,329
	Rate	Households	152	32.3	45.5	60.0	88.1	26.0	43.1	72.9	98.9
	Rate	People		46.6	61.6	76.0	95.9	38.4	60.0	89.0	99.6
<b>Rural</b>	Line	People		105	168	210	421	92	155	267	1,052
	Rate	Households	269	80.2	94.5	95.6	98.4	75.7	93.0	97.3	100.0
	Rate	People		88.8	97.6	98.2	99.7	85.3	96.9	98.9	100.0
<b>All</b>	Line	People		110	176	220	441	97	163	280	1,103
	Rate	Households	421	67.6	81.6	86.2	95.7	62.6	79.9	90.9	99.7
	Rate	People		81.0	91.0	94.1	99.0	76.7	90.1	97.1	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Samburu): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		84	64	85	125	153	186	306
	Rate	Households	152	8.7	2.3	9.2	15.8	20.8	29.5	50.5
	Rate	People		16.3	4.7	16.8	26.1	32.2	42.5	66.5
<b>Rural</b>	Line	People		69	52	70	103	125	153	252
	Rate	Households	269	49.4	29.0	51.5	75.2	80.2	86.8	96.8
	Rate	People		61.0	36.4	63.0	85.4	89.3	93.8	99.0
<b>All</b>	Line	People		72	54	72	107	130	159	262
	Rate	Households	421	38.7	22.0	40.4	59.6	64.6	71.7	84.6
	Rate	People		52.8	30.6	54.5	74.5	78.8	84.4	93.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Siaya): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		79	173	259	345
	Rate	Households	178	4.2	44.8	65.0	77.4
	Rate	People		5.7	51.2	70.2	83.9
<b>Rural</b>	Line	People		62	103	155	206
	Rate	Households	307	4.2	24.9	51.6	70.3
	Rate	People		6.1	31.5	61.4	78.9
<b>All</b>	Line	People		64	111	167	222
	Rate	Households	485	4.2	27.4	53.3	71.2
	Rate	People		6.1	33.8	62.4	79.5

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Siaya): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		121	193	241	482	106	178	306	1,206
	Rate	Households	178	32.6	61.2	68.8	91.8	26.3	55.3	80.8	99.6
	Rate	People		45.2	72.4	79.4	96.9	38.3	68.8	88.9	99.9
<b>Rural</b>	Line	People		91	146	183	366	80	135	232	915
	Rate	Households	307	30.2	62.3	75.8	94.4	22.6	55.3	84.6	100.0
	Rate	People		41.0	74.2	86.1	98.0	31.3	67.8	92.2	100.0
<b>All</b>	Line	People		95	152	190	379	83	140	241	949
	Rate	Households	485	30.5	62.1	74.9	94.1	23.0	55.3	84.2	99.9
	Rate	People		41.5	74.0	85.3	97.9	32.1	67.9	91.8	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Siaya): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		77	58	77	113	138	169	278
	Rate	Households	178	8.7	3.6	11.6	26.0	34.2	42.3	71.5
	Rate	People		15.0	6.0	20.5	38.3	46.8	54.4	82.9
<b>Rural</b>	Line	People		60	45	60	89	109	133	219
	Rate	Households	307	17.0	10.0	20.0	39.2	51.6	62.4	85.0
	Rate	People		23.6	14.6	27.0	50.9	62.7	73.2	92.9
<b>All</b>	Line	People		62	47	62	92	112	137	226
	Rate	Households	485	16.0	9.2	19.0	37.5	49.4	59.9	83.3
	Rate	People		22.6	13.6	26.3	49.5	60.8	71.0	91.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Taita/Taveta): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		85	189	283	378
	Rate	Households	145	0.0	22.4	45.6	61.2
	Rate	People		0.0	28.3	54.4	70.7
<b>Rural</b>	Line	People		67	112	168	225
	Rate	Households	300	6.0	27.3	50.4	67.2
	Rate	People		6.5	33.3	60.0	76.3
<b>All</b>	Line	People		71	127	191	254
	Rate	Households	445	4.7	26.3	49.3	65.9
	Rate	People		5.3	32.3	58.9	75.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Taita/Taveta): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		126	202	252	504	110	186	320	1,262
	Rate	Households	145	14.9	34.1	45.7	79.7	11.1	30.1	60.4	99.3
	Rate	People		25.0	45.6	57.0	88.5	17.6	41.5	73.8	99.8
<b>Rural</b>	Line	People		100	159	199	398	87	147	253	996
	Rate	Households	300	31.8	57.4	66.2	94.5	23.3	53.0	79.5	100.0
	Rate	People		42.6	70.6	78.8	97.9	30.1	65.9	87.3	100.0
<b>All</b>	Line	People		105	168	209	419	92	154	266	1,048
	Rate	Households	445	28.1	52.3	61.7	91.3	20.6	48.0	75.3	99.9
	Rate	People		39.2	65.7	74.6	96.0	27.7	61.2	84.7	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Taita/Taveta): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		80	60	80	119	145	177	291
	Rate	Households	145	1.8	0.0	1.8	7.5	10.9	19.9	40.9
	Rate	People		2.5	0.0	2.5	10.7	17.5	28.6	52.2
<b>Rural</b>	Line	People		66	49	66	97	119	145	238
	Rate	Households	300	8.2	4.1	9.6	29.7	38.0	52.6	72.8
	Rate	People		12.0	5.2	14.0	39.3	49.8	65.8	83.3
<b>All</b>	Line	People		68	52	69	101	124	151	248
	Rate	Households	445	6.8	3.2	7.9	24.8	32.1	45.5	65.8
	Rate	People		10.1	4.2	11.8	33.8	43.5	58.6	77.3

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Tana River): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		91	210	315	420
	Rate	Households	146	11.7	55.6	72.7	86.8
	Rate	People		18.2	66.2	82.6	91.5
<b>Rural</b>	Line	People		73	122	183	244
	Rate	Households	289	17.2	50.8	73.7	84.4
	Rate	People		17.8	55.3	81.4	89.4
<b>All</b>	Line	People		77	140	210	280
	Rate	Households	435	15.8	51.9	73.5	85.0
	Rate	People		17.9	57.5	81.6	89.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Tana River): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		130	208	260	521	114	192	330	1,303
	Rate	Households	146	42.5	64.4	71.5	96.8	35.0	58.3	81.4	99.4
	Rate	People		53.4	75.1	81.2	99.1	45.9	71.3	91.0	99.9
<b>Rural</b>	Line	People		108	173	216	433	95	160	274	1,082
	Rate	Households	289	60.5	79.8	89.3	96.5	50.3	77.1	92.3	100.0
	Rate	People		68.8	87.3	93.7	97.1	57.0	85.1	95.1	100.0
<b>All</b>	Line	People		113	180	225	451	99	166	286	1,127
	Rate	Households	435	56.1	76.1	85.0	96.6	46.6	72.6	89.7	99.9
	Rate	People		65.6	84.8	91.1	97.5	54.8	82.3	94.3	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Tana River): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		83	62	83	122	150	183	300
	Rate	Households	146	8.5	5.0	8.8	24.7	31.6	42.4	61.7
	Rate	People		12.0	7.5	12.7	34.0	41.0	54.8	75.5
<b>Rural</b>	Line	People		71	54	72	106	129	157	259
	Rate	Households	289	22.4	13.0	23.7	46.2	60.5	69.8	88.5
	Rate	People		25.3	13.7	26.8	50.1	67.3	75.4	93.2
<b>All</b>	Line	People		74	56	74	109	133	163	267
	Rate	Households	435	19.0	11.1	20.1	41.1	53.5	63.2	82.1
	Rate	People		22.6	12.5	24.0	46.8	62.0	71.3	89.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Tharaka-Nithi): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
					100%	150%	200%
<b>Urban</b>	Line	People		68	124	186	248
	Rate	Households	143	1.8	21.4	35.7	56.1
	Rate	People		2.0	27.4	44.2	64.5
<b>Rural</b>	Line	People		64	107	160	214
	Rate	Households	304	1.6	18.4	44.0	57.3
	Rate	People		1.8	22.4	56.1	68.8
<b>All</b>	Line	People		65	111	167	222
	Rate	Households	447	1.7	19.2	41.7	57.0
	Rate	People		1.8	23.6	53.2	67.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Tharaka-Nithi): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		119	191	238	476	104	176	302	1,192
	Rate	Households	143	20.6	44.0	57.4	90.0	16.4	42.6	69.9	100.0
	Rate	People		29.5	58.4	71.5	94.0	23.8	56.3	82.5	100.0
<b>Rural</b>	Line	People		95	152	189	379	83	140	240	948
	Rate	Households	304	21.7	50.4	64.5	90.2	14.2	46.2	77.1	99.8
	Rate	People		28.0	63.7	77.0	96.0	18.3	60.8	88.2	100.0
<b>All</b>	Line	People		101	161	201	403	88	149	255	1,008
	Rate	Households	447	21.4	48.6	62.5	90.2	14.8	45.2	75.1	99.9
	Rate	People		28.4	62.4	75.6	95.5	19.6	59.7	86.8	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Tharaka-Nithi): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			
							40th	50th	60th	80th
<b>Urban</b>	Line	People		76	57	76	112	137	167	275
	Rate	Households	143	3.1	1.7	4.0	15.0	23.7	30.7	57.0
	Rate	People		5.0	2.5	6.6	23.3	32.2	40.0	71.7
<b>Rural</b>	Line	People		62	47	63	92	113	138	227
	Rate	Households	304	8.7	5.2	9.6	28.8	40.4	47.8	73.9
	Rate	People		10.5	6.1	11.8	39.1	53.9	61.7	84.0
<b>All</b>	Line	People		66	50	66	97	119	145	238
	Rate	Households	447	7.1	4.2	8.0	24.9	35.7	43.0	69.2
	Rate	People		9.2	5.2	10.5	35.2	48.5	56.3	81.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Trans Nzoia): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		75	157	236	314
	Rate	Households	176	3.7	24.7	46.0	67.8
	Rate	People		4.7	29.1	53.1	73.0
<b>Rural</b>	Line	People		60	100	150	201
	Rate	Households	309	9.2	29.4	57.8	71.7
	Rate	People		11.0	35.2	64.2	78.0
<b>All</b>	Line	People		63	112	167	223
	Rate	Households	485	7.9	28.3	55.0	70.8
	Rate	People		9.7	34.0	62.0	77.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Trans Nzoia): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		116	186	233	465	102	172	295	1,164
	Rate	Households	176	21.7	49.7	59.5	88.4	16.8	45.7	71.3	98.3
	Rate	People		30.0	59.6	71.2	94.5	24.3	54.8	80.7	99.6
<b>Rural</b>	Line	People		89	142	178	356	78	131	226	890
	Rate	Households	309	37.0	66.1	74.3	94.0	31.7	60.9	84.0	98.9
	Rate	People		44.3	74.6	81.6	97.4	37.8	69.6	89.3	99.8
<b>All</b>	Line	People		94	151	189	378	83	139	240	945
	Rate	Households	485	33.3	62.2	70.8	92.7	28.2	57.3	81.0	98.8
	Rate	People		41.5	71.6	79.5	96.8	35.1	66.6	87.6	99.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Trans Nzoia): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
							40th	50th	60th	
<b>Urban</b>	Line	People		74	56	74	109	134	163	268
	Rate	Households	176	7.6	4.8	8.2	17.0	24.8	34.3	58.3
	Rate	People		12.4	8.0	13.1	25.4	34.7	45.3	69.9
<b>Rural</b>	Line	People		59	44	59	87	106	129	213
	Rate	Households	309	24.0	15.2	26.2	47.3	59.6	69.5	86.1
	Rate	People		30.2	19.5	32.4	54.6	67.8	76.6	92.4
<b>All</b>	Line	People		62	47	62	91	112	136	224
	Rate	Households	485	20.1	12.8	21.9	40.1	51.4	61.2	79.5
	Rate	People		26.7	17.2	28.6	48.8	61.2	70.4	87.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Turkana): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		106	249	373	498
	Rate	Households	136	25.9	62.6	74.6	79.9
	Rate	People		35.5	76.2	89.1	91.7
<b>Rural</b>	Line	People		77	129	193	258
	Rate	Households	277	56.1	76.7	84.2	88.7
	Rate	People		62.8	81.2	88.9	91.9
<b>All</b>	Line	People		88	173	260	347
	Rate	Households	413	43.6	70.8	80.2	85.0
	Rate	People		52.7	79.4	89.0	91.8

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Turkana): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		149	238	298	595	130	220	377	1,489
	Rate	Households	136	51.6	65.2	72.5	82.3	47.5	63.8	75.2	100.0
	Rate	People		69.1	82.3	89.3	93.9	65.5	79.4	90.2	100.0
<b>Rural</b>	Line	People		114	183	228	457	100	169	290	1,143
	Rate	Households	277	78.8	86.9	90.3	96.6	76.8	85.8	93.9	99.7
	Rate	People		84.8	91.8	93.4	98.6	82.8	90.6	96.7	99.9
<b>All</b>	Line	People		127	203	254	508	111	187	322	1,271
	Rate	Households	413	67.5	77.9	82.9	90.7	64.6	76.6	86.1	99.8
	Rate	People		79.0	88.3	91.9	96.9	76.4	86.4	94.3	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Turkana): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
<b>Urban</b>	Line	People		95	71	95	140	171	209	343
	Rate	Households	136	11.5	6.7	13.9	28.8	36.0	40.0	61.0
	Rate	People		16.0	11.5	20.4	43.9	50.5	55.1	76.1
<b>Rural</b>	Line	People		75	57	76	111	136	166	273
	Rate	Households	277	58.9	48.6	61.2	79.0	83.0	86.4	92.9
	Rate	People		64.4	54.0	67.3	85.3	87.8	90.6	96.2
<b>All</b>	Line	People		83	62	83	122	149	182	299
	Rate	Households	413	39.2	31.2	41.6	58.1	63.5	67.1	79.6
	Rate	People		46.5	38.3	49.9	69.9	73.9		88.7

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Wajir): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		98	181	272	362
	Rate	Households	180	12.4	59.0	86.8	94.4
	Rate	People		14.2	66.2	90.6	96.4
<b>Rural</b>	Line	People		77	128	192	256
	Rate	Households	229	7.8	53.3	80.6	93.0
	Rate	People		9.3	61.5	85.4	96.0
<b>All</b>	Line	People		82	141	211	281
	Rate	Households	409	8.8	54.6	81.9	93.4
	Rate	People		10.5	62.6	86.7	96.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Wajir): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		168	268	335	671	147	247	425	1,678
	Rate	Households	180	76.8	94.0	96.8	99.8	69.3	93.1	96.8	100.0
	Rate	People		83.6	96.1	98.4	99.9	77.2	95.4	98.4	100.0
<b>Rural</b>	Line	People		113	181	227	454	99	167	288	1,135
	Rate	Households	229	70.2	93.2	95.2	99.4	57.7	89.5	97.1	100.0
	Rate	People		78.0	96.5	98.0	99.7	65.6	93.8	99.1	100.0
<b>All</b>	Line	People		126	202	253	506	111	187	321	1,266
	Rate	Households	409	71.7	93.4	95.5	99.5	60.3	90.3	97.1	100.0
	Rate	People		79.4	96.4	98.1	99.8	68.4	94.2	98.9	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Wajir): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		107	80	107	158	193	235	387
	Rate	Households	180	4.2	0.5	6.6	17.8	32.1	49.5	75.7
	Rate	People		5.2	0.5	8.3	20.9	36.1	54.2	83.2
<b>Rural</b>	Line	People		75	56	75	111	135	165	271
	Rate	Households	229	14.0	7.5	16.4	41.1	54.6	71.3	92.3
	Rate	People		16.1	8.8	18.5	46.7	61.8	79.7	96.2
<b>All</b>	Line	People		82	62	83	122	149	182	299
	Rate	Households	409	11.9	6.0	14.2	36.0	49.6	66.5	88.6
	Rate	People		13.5	6.8	16.0	40.5	55.6	73.6	93.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (West Pokot): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		77	152	229	305
	Rate	Households	106	6.1	38.6	68.2	83.1
	Rate	People		8.3	45.6	74.5	86.9
<b>Rural</b>	Line	People		63	106	159	211
	Rate	Households	329	24.7	55.0	80.4	90.3
	Rate	People		27.8	58.5	86.0	93.4
<b>All</b>	Line	People		65	110	164	219
	Rate	Households	435	22.6	53.1	79.0	89.4
	Rate	People		26.2	57.4	85.0	92.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (West Pokot): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		125	200	250	500	110	185	317	1,252
	Rate	Households	106	41.0	63.8	73.2	92.6	32.8	59.5	80.6	100.0
	Rate	People		54.6	79.9	87.8	95.3	45.5	73.8	92.0	100.0
<b>Rural</b>	Line	People		94	150	188	375	82	138	238	938
	Rate	Households	329	66.9	87.3	94.3	99.9	56.6	84.0	96.6	100.0
	Rate	People		71.8	91.6	97.4	100.0	61.0	88.9	99.0	100.0
<b>All</b>	Line	People		96	154	193	386	84	142	245	965
	Rate	Households	435	63.9	84.6	91.9	99.1	53.8	81.2	94.8	100.0
	Rate	People		70.4	90.6	96.6	99.6	59.7	87.7	98.4	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (West Pokot): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
							40th	50th	60th	
<b>Urban</b>	Line	People		80	60	80	118	144	175	288
	Rate	Households	106	10.3	7.3	11.9	24.8	38.0	44.9	69.5
	Rate	People		15.3	11.0	18.0	35.4	51.7	59.0	81.7
<b>Rural</b>	Line	People		62	47	62	92	112	136	224
	Rate	Households	329	43.4	29.0	45.9	70.4	79.7	85.0	98.3
	Rate	People		46.5	32.6	48.3	75.9	83.6	89.1	99.7
<b>All</b>	Line	People		63	48	64	94	114	140	230
	Rate	Households	435	39.6	26.5	42.0	65.2	75.0	80.4	95.0
	Rate	People		43.8	30.8	45.7	72.5	80.9	86.6	98.2

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.



**Table 1 (Uasin Gishu): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		82	182	273	364
	Rate	Households	226	6.0	25.2	57.3	75.7
	Rate	People		8.6	31.7	60.7	79.1
<b>Rural</b>	Line	People		63	105	158	210
	Rate	Households	263	11.4	39.8	60.1	79.9
	Rate	People		14.7	48.0	69.6	87.4
<b>All</b>	Line	People		71	138	207	276
	Rate	Households	489	8.5	32.0	58.6	77.6
	Rate	People		12.1	41.0	65.8	83.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Uasin Gishu): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		121	193	241	482	106	178	306	1,207
	Rate	Households	226	15.3	39.3	57.5	89.5	12.2	33.9	72.3	99.6
	Rate	People		22.0	51.8	69.5	95.6	17.3	47.6	81.8	99.9
<b>Rural</b>	Line	People		93	149	186	373	82	137	236	932
	Rate	Households	263	43.9	71.9	82.3	96.0	37.1	65.7	88.1	99.3
	Rate	People		53.2	81.2	91.6	98.6	46.3	75.0	95.5	99.9
<b>All</b>	Line	People		105	168	210	420	92	155	266	1,050
	Rate	Households	489	28.6	54.5	69.0	92.5	23.8	48.7	79.7	99.5
	Rate	People		39.9	68.6	82.1	97.3	33.9	63.2	89.6	99.9

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Uasin Gishu): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	Percentile-based lines (2015 def.)					
					10th	20th	40th	50th	60th	80th
<b>Urban</b>	Line	People		77	58	77	114	139	169	278
	Rate	Households	226	7.2	4.3	7.7	13.1	19.7	25.2	52.7
	Rate	People		10.6	6.7	11.3	18.4	28.1	36.8	64.4
<b>Rural</b>	Line	People		61	46	62	91	111	136	223
	Rate	Households	263	24.6	12.4	30.5	49.0	60.5	71.0	88.1
	Rate	People		30.6	15.8	37.5	58.1	71.2	81.3	96.0
<b>All</b>	Line	People		68	51	68	101	123	150	247
	Rate	Households	489	15.3	8.0	18.3	29.8	38.7	46.5	69.2
	Rate	People		22.1	11.9	26.3	41.2	52.8	62.3	82.5

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Vihiga): National poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates			
				Food	National (1997 def.)		
				100%	150%	200%	
<b>Urban</b>	Line	People		75	141	212	282
	Rate	Households	190	5.2	37.9	73.3	84.6
	Rate	People		5.0	43.0	76.8	88.4
<b>Rural</b>	Line	People		70	116	175	233
	Rate	Households	267	9.1	39.1	73.6	85.9
	Rate	People		10.3	43.4	78.6	89.6
<b>All</b>	Line	People		72	126	189	252
	Rate	Households	457	7.6	38.6	73.5	85.4
	Rate	People		8.2	43.2	77.9	89.1

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-adult-equivalent per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Vihiga): International 2005 and 2011 PPP poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates							
				Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
				\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
<b>Urban</b>	Line	People		129	206	257	514	113	190	326	1,287
	Rate	Households	190	51.6	75.8	84.5	98.1	41.4	72.2	92.5	100.0
	Rate	People		60.5	84.8	89.8	99.4	50.1	81.7	95.3	100.0
<b>Rural</b>	Line	People		103	165	206	413	90	152	262	1,033
	Rate	Households	267	44.3	81.8	88.9	99.1	35.4	76.6	93.9	100.0
	Rate	People		52.0	87.6	92.2	99.6	42.2	83.3	96.3	100.0
<b>All</b>	Line	People		113	181	226	453	99	167	287	1,133
	Rate	Households	457	47.2	79.4	87.1	98.7	37.8	74.9	93.4	100.0
	Rate	People		55.3	86.5	91.2	99.5	45.3	82.7	95.9	100.0

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 1 (Vihiga): Relative and percentile-based poverty lines and poverty rates for households and people by urban/rural/all**

Area	Line or Rate	Households or People	<i>n</i>	Poverty lines and poverty rates						
				Poorest 1/2 < 100% Natl.	10th	20th	Percentile-based lines (2015 def.)			80th
<b>Urban</b>	Line	People		82	62	82	121	148	180	297
	Rate	Households	190	6.5	2.3	7.1	28.8	39.2	51.5	81.0
	Rate	People		8.0	2.2	8.9	34.8	47.1	59.8	86.6
<b>Rural</b>	Line	People		68	51	68	101	123	150	247
	Rate	Households	267	14.5	4.9	17.9	39.2	52.8	67.5	89.7
	Rate	People		16.6	5.1	20.5	47.4	60.1	74.3	93.3
<b>All</b>	Line	People		74	55	74	109	133	162	267
	Rate	Households	457	11.3	3.9	13.6	35.0	47.3	61.0	86.2
	Rate	People		13.2	3.9	15.9	42.4	55.0	68.6	90.6

Source: 2015/16 KIHBS

Poverty rates are percentages.

Poverty lines are KES per-person per-day.

Lines are KES in medians of prices by urban/rural in Kenya during the 2015/16 KIHBS field work.

**Table 2: Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
113	What is the highest educational level that the (eldest) female head/spouse reached, and what is the highest grade that she completed at that level?(None, madrassa/ <i>duksi</i> , pre-primary, primary grade 1, or other; Primary grades 1 to 6; Primary grades 7 or 8; No female head/spouse; Secondary years 1 to 3; Secondary year 4, or higher)
97	How many household members are there? (Eight or more; Seven; Six; Five; Four; Three; Two; One)
94	How many household members are 18-years-old or younger? (Five or more; Four; Three; Two; One; None)
91	How many household members are 17-years-old or younger? (Five or more; Four; Three; Two; One; None)
89	How many household members are 16-years-old or younger? (Five or more; Four; Three; Two; One; None)
82	How many household members are 15-years-old or younger? (Four or more; Three; Two; One; None)
81	Do all household members ages 6 to 18 attend a public or private school or a academic institution? (If school is not in session now then ask whether all household members ages 6 to 18 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 18)
80	What is the predominant floor material of the main dwelling unit? (Dung, earth/sand, palm/bamboo, or other; Cement, wood planks/shingles, parquet or polished wood, vinyl or asphalt strips, carpet, or cermamic tiles)
80	Do all household members ages 6 to 16 attend a public or private school or a academic institution? (If school is not in session now then ask whether all household members ages 6 to 16 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 16)
79	Do all household members ages 6 to 15 attend a public or private school or a academic institution? (If school is not in session now then ask whether all household members ages 6 to 15 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 15)

**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
79	If the (eldest) female head/spouse has a mobile phone, then has she subscribed to a mobile-money transfer platform or a mobile-banking platform? (No cell phone, only cell phone but no mobile-money transfer platform nor mobile-banking platform; Has cell phone with mobile-banking platform, but no mobile-money transfer platform; Has cell phone with both mobile-money transfer platform and mobile-banking platform; No female head/spouse; Has cell phone with mobile-money transfer platform, but no mobile-banking platform)
79	Do all household members ages 6 to 17 attend a public or private school or a academic institution? (If school is not in session now then ask whether all many household members ages 6 to 17 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 17)
78	Do all household members ages 6 to 14 attend a public or private school or a academic institution? (If school is not in session now then ask whether all household members ages 6 to 14 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 14)
78	Do all household members ages 6 to 12 attend a public or private school or a academic institution? (If school is not in session now then ask whether all household members ages 6 to 12 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 12)
77	Do all household members ages 6 to 13 attend a public or private school or a academic institution? (If school is not in session now then ask whether any household members ages 6 to 13 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 13)
76	How many household members are 14-years-old or younger? (Four or more; Three; Two; One; None)



**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
75	Over the past one year, what was the main source of water for your household for drinking? (Tubewell/borehole with pump; River, stream, pond, dam, lake, canal, or irrigation channel; Unprotected well; Unprotected spring; Protected spring; Public tap/standpipe; Protected well; Cart with small tank/drum/buckets, bicycles with buckets, or other; Rainwater collection, or tanker truck; Piped into plot/yard; Piped into dwelling, or bottled water)
74	How many household members are 13-years-old or younger? (Four or more; Three; Two; One; None)
74	What is the main source of energy for cooking? (Firewood, straw/shrubs/grass, animal dung, or agricultural crop residue; Charcoal, kerosene, electricity, or other; Liquified petroleum gas (LPG), or biogas)
73	Do all household members ages 6 to 11 attend a public or private school or a academic institution? (If school is not in session now then ask whether all household members ages 6 to 11 attended a public or private school in the session just completed and plan to attend a public or private school next session?) (None; All attend public; At least one attends private; No members 6 to 11)
71	Can the (eldest) female head/spouse read and write in any language? (No; No female head/spouse; Yes)
69	What kind of toilet facility does your household usually use? (No facility/bush/field, hanging toilet/hanging latrine, composting toilet, bucket toilet, or other; Pit latrine without slab/open pit, pit latrine with slab, or ventilated improved pit latrine (VIP); Flush to pit (latrine), or flush to septic tank, piped sewer system or somewhere else)
69	Does the household have a functional television? (No; Yes)
69	How many household members are 12-years-old or younger? (Four or more; Three; Two; One; None)
68	What is the main source of lighting? (Fuel wood, battery lamp/torch, biogas, paraffin tin lamp, paraffin pressure lamp, gas lamp, candles, paraffin lantern, or other; Electricity connections from the mains, generator, or solar energy)

**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
68	What is the highest educational level that the male head/spouse reached, and what is the highest grade completed at that level? (None; pre-primary, madrassa/ <i>duksi</i> , or other; Primary grades 1 to 4; Primary grades 5 to 7; No male head/spouse; Primary grade 8, or secondary, year 1; Secondary years 2 to 4, or post-primary vocational (any grade); College, middle level (any year); University undergraduate (any year), or higher)
67	Does the (eldest) female head/spouse have a mobile phone? (No; Yes; No female head/spouse)
67	In what type of residence does the household live? ( <i>Manyatta</i> /traditional house, shanty, or other; Bungalow; <i>Swahili</i> ; <i>Landhi</i> ; Flat or maisonnette)
65	What is the main type of appliance used for cooking? (Ordinary or improved <i>jiko</i> , kerosene stove, or other; Traditional stone fire; Improved traditional stone fire, gas cooker, electric cooker, or electric/gas cooker)
65	In the last 12 months, has the household subscribed to pay TV? (No; Yes)
64	What is the predominant wall material of the main dwelling unit? (Cane/palm/trunks, mud/cow dung, grass/reeds, no walls, or other; Corrugated iron sheets, plywood, cardboard, or reused wood; Bamboo with mud, stone with mud, uncovered adobe, covered adobe, stone with lime/cement, cement, bricks, cement blocks, or wood planks/shingles)
63	How many household members are 11-years-old or younger? (Four or more; Three; Two; One; None)
60	Is there a place for hand-washing in or near the toilet facility? (No facility/bush/field; No; Yes)
50	Does the household have an internet connection of any type? (No; Yes)
48	What is the predominant roof material of the main dwelling unit? (Grass/thatch/ <i>makuti</i> , dung/mud, tin cans, or other; Corrugated iron sheets, asbestos sheets, concrete, or tile)
42	In the last 12 months, were any members of the household covered by any health insurance? (No; Yes)
39	Does your household own this dwelling (house, flat, shack), do you rent it, or do you live here without paying? (Owns, or is squatting without paying rent; Pays rent/lease; Does not pay rent with the consent of the owner)

**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
38	Does your household share its toilet facility with other households? (Yes, shares; No facility/bush/field; No, does not share)
36	What is the marital status of the (eldest) female head/spouse? (Married, polygamous; Widow, divorced, or separated; Married, monogamous, or living together; Never-married; No female head/spouse)
32	If the male head/spouse has a mobile phone, then has he subscribed to a mobile-money transfer platform or a mobile-banking platform? (No cell phone, or has cell phone but no mobile-money transfer platform nor mobile-banking platform; No male head/spouse; Has cell phone with mobile-banking platform, but no mobile-money transfer platform; Has cell phone with both mobile-money transfer platform and mobile-banking platform; Has cell phone with mobile-money transfer platform, but no mobile-banking platform)
31	How many household members are 6-years-old or younger? (Three or more; Two; One; None)
30	Do all household members ages 6 to 18 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 18 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 18)
28	Can the male head/spouse read and write in any language? (No; No male head/spouse; Yes)
27	Do all household members ages 6 to 16 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 16 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 16)
27	Do all household members ages 6 to 17 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 17 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 17)
26	Do all household members ages 6 to 14 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 14 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 14)

**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
26	Do all household members ages 6 to 15 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 15 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 15)
25	Do all household members ages 6 to 13 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 13 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 13)
25	Do all household members ages 6 to 12 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 12 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 12)
25	Do all household members ages 6 to 11 attend school or an academic institution? (If school is not in session now then ask whether all household members ages 6 to 11 attended school in the session just completed and plan to attend school next session) (No; Yes; No member ages 6 to 11)
24	In the last seven days, has the (eldest) female head/spouse worked or helped for at least one hour on her own account or as an employee on a farm owned or rented, whether cultivating crops or in other farm-maintenance tasks, or has she cared for livestock belonging to her or to a member of the household? (Yes; No; No female head/spouse)
24	In the last seven days, has the (eldest) female head/spouse worked at least one hour on her own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on? (No; Yes; No female head/spouse)
22	In the last seven days, has the (eldest) female head/spouse worked at least one hour as an employee for wage, salary, commission, or any payment in kind, including doing paid domestic or paid farm work? (No; Yes; No female head/spouse)
22	Does the household have a functional computer? (No; Yes)
21	Does the male head/spouse have a mobile phone? (No; No male head/spouse; Yes)
20	How many household members have a mobile phone? (None; One; Two or more)

**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
18	What do you usually do to make the water safe to drink? (Nothing; Add bleach/chlorine (WaterGuard, AquaGuard, and so on); Boil; Sieve through a cloth, use water filter (ceramic, sand, composite, and so on), solar disinfection, let it stand and settle, other)
15	What is the marital status of the male head/spouse? (Married, polygamous; No male head/spouse; Married, monogamous; Never-married, living together, separated, divorced, or widower)
12	In the last seven days, did any members of the household work or help for at least one hour on their own account or as an employee on a farm owned or rented, whether cultivating crops or in other farm maintenance tasks, or cared for livestock belonging to them or to a member of the household? (Yes; No)
11	How many habitable rooms does this household occupy in its main dwelling (do not count bathrooms, toilets, storerooms, or garages)? (One, or none; Two; Three; Four or more)
10	How many dwelling units does this household occupy? (Two or more; One)
8	In the last 7 days, were any household members casual workers in their main/primary job? (Yes; No)
7	Do any household members have a disability that gives them difficulties in engaging in an economic activity? (Yes; No)
7	In the last seven days, how many members of the household worked at least one hour as an employee for a wage, salary, commission, or any payment in kind, including doing paid domestic or paid farm work? (None; One; Two or more)
6	In the last seven days, has the male head/spouse worked or helped for at least one hour on his own account or as an employee on a farm owned or rented, whether cultivating crops or in other farm-maintenance tasks, or has he cared for livestock belonging to him or to a member of the household? (Yes; No male head/spouse; No)

**Table 2 (cont.): Poverty indicators**

<u>Uncertainty coefficient</u>	<u>Indicator (Responses ordered starting with those linked with higher poverty likelihoods)</u>
5	In the last seven days, has the male head/spouse worked at least one hour on his own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on? (No male head/spouse; No; Yes)
4	In the last seven days, has the male head/spouse worked at least one hour as an employee for wage, salary, commission, or any payment in kind, including doing paid domestic or paid farm work? (No; No male head/spouse; Yes;)
3	Over the past 12 months, did the household receive any support (in cash or in kind) from any source (individuals/family/institutions) outside your household? (Yes; No)
2	In the last seven days, did the male head/spouse or the (eldest) female head/spouse work at least one hour on their own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on? (No; Yes)
2	In the last seven days, did any members of the household work at least one hour on their own account or as an employer in a business enterprise, for example, as a trader, shopkeeper, barber, dressmaker, carpenter, taxi driver, car washer, and so on? (No; Yes)
1	Does this household have an installed solar panel(s) in the dwelling? (No; Yes)

Source: 2015/16 KIHBS with 100% of the national poverty line

**Tables for  
100% of the National Poverty Line  
  
(and Tables Pertaining  
to All Poverty Lines)**

**Table 3 (100% of the national line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	80.4
26–32	64.6
33–35	55.1
36–38	50.7
39–41	48.2
42–44	43.2
45–47	33.9
48–50	31.4
51–53	27.1
54–55	20.9
56–58	18.3
59–60	16.5
61–62	15.2
63–64	9.0
65–66	6.4
67–69	6.0
70–72	3.8
73–75	3.3
76–80	2.1
81–100	0.9



**Table 4 (100% of the national line): Derivation of estimated poverty likelihoods**

Score	Households in range and < poverty line		All households in range		Poverty likelihood (%)
0–25	4,073	÷	5,068	=	80.4
26–32	4,399	÷	6,810	=	64.6
33–35	1,856	÷	3,369	=	55.1
36–38	2,403	÷	4,740	=	50.7
39–41	2,465	÷	5,119	=	48.2
42–44	2,074	÷	4,795	=	43.2
45–47	1,848	÷	5,447	=	33.9
48–50	1,705	÷	5,428	=	31.4
51–53	1,499	÷	5,523	=	27.1
54–55	1,008	÷	4,814	=	20.9
56–58	973	÷	5,313	=	18.3
59–60	849	÷	5,151	=	16.5
61–62	587	÷	3,860	=	15.2
63–64	429	÷	4,760	=	9.0
65–66	380	÷	5,924	=	6.4
67–69	336	÷	5,601	=	6.0
70–72	173	÷	4,586	=	3.8
73–75	174	÷	5,280	=	3.3
76–80	100	÷	4,740	=	2.1
81–100	32	÷	3,670	=	0.9

Number of all households normalized to sum to 100,000.

**Table 5 (100% of the national line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+0.7	2.9	3.4	4.6
26-32	0.0	3.2	3.8	4.9
33-35	+7.8	4.2	5.0	6.4
36-38	-5.6	5.0	5.6	7.0
39-41	-19.6	11.6	12.0	12.5
42-44	-0.3	3.4	4.1	5.3
45-47	-15.4	9.6	10.1	10.9
48-50	-2.8	3.6	4.3	5.8
51-53	+0.5	3.1	3.8	4.7
54-55	-3.2	4.1	4.8	5.9
56-58	+9.1	1.5	1.7	2.4
59-60	+4.4	2.3	2.7	3.4
61-62	+7.9	1.8	2.2	3.0
63-64	+6.0	0.9	1.0	1.3
65-66	+0.8	1.3	1.5	2.0
67-69	+3.9	0.6	0.7	0.9
70-72	+0.8	1.1	1.4	1.8
73-75	-0.1	1.0	1.2	1.5
76-80	+1.3	0.4	0.4	0.6
81-100	+0.7	0.2	0.2	0.2

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (100% of the national line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-1.2	64.0	73.6	88.3
4	-0.3	36.0	42.9	54.0
8	-0.5	26.6	32.2	38.2
16	+0.2	17.7	21.0	26.6
32	-0.2	13.1	15.4	19.5
64	-0.3	9.2	10.8	14.9
128	-0.1	6.4	7.5	10.8
256	+0.1	4.627	5.4	7.0
512	+0.1	3.2	3.9	4.9
1,024	+0.2	2.3	2.8	3.5
2,048	+0.2	1.6	2.0	2.5
4,096	+0.2	1.1	1.3	1.9
8,192	+0.2	0.780	0.9	1.3
16,384	+0.2	0.582	0.7	0.9

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 7 (National lines): Errors in households' estimated poverty rates at a point in time, precision, and the  $\alpha$  factor for precision**

	Poverty lines			
	Food	100%	150%	200%
Error (estimate minus observed value)	+0.4	+0.2	-0.1	-0.3
Precision of estimate	0.3	0.6	0.8	0.8
Alpha factor for precision	0.82	1.00	1.17	1.30

Scorecard applied to 1,000 bootstraps from the validation sample.

Errors (differences between estimates and observed values) are in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of  $\pm$  percentage points.

Errors and precision estimated from 1,000 bootstraps with  $n = 16,384$ .

Alpha is estimated from 1,000 bootstrap samples of  $n = 256, 512, 1,024, 2,048, 4,096, 8,192, \text{ and } 16,384$ .

**Table 7 (International 2005 and 2011 PPP lines): Errors in households' estimated poverty rates at a point in time, precision, and the  $\alpha$  factor for precision**

	Poverty lines							
	Intl. 2005 PPP (2015 def.)				Intl. 2011 PPP (2015 def.)			
	\$1.25	\$2.00	\$2.50	\$5.00	\$1.90	\$3.20	\$5.50	\$21.70
Error (estimate minus observed value)	+3.2	+4.2	+5.2	+3.3	+2.7	+6.2	+5.8	+0.1
Precision of estimate	0.5	0.6	0.7	0.7	0.5	0.6	0.7	0.2
Alpha factor for precision	0.91	0.98	1.14	1.62	0.89	0.89	1.28	1.82

Scorecard applied to 1,000 bootstraps from the validation sample.

Errors (differences between estimates and observed values) are in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of  $\pm$  percentage points.

Errors and precision estimated from 1,000 bootstraps with  $n = 16,384$ .

Alpha is estimated from 1,000 bootstrap samples of  $n = 256, 512, 1,024, 2,048, 4,096, 8,192, \text{ and } 16,384$ .

**Table 7 (Relative and percentile-based lines): Errors in households' estimated poverty rates at a point in time, precision, and the  $\alpha$  factor for precision**

	Poverty lines						
	Poorest 1/2 < 100% Natl.	10th	20th	40th	50th	60th	80th
Error (estimate minus observed value)	+1.1	+0.3	+1.6	+3.8	+3.3	+6.0	+7.0
Precision of estimate	0.3	0.2	0.4	0.5	0.6	0.6	0.7
Alpha factor for precision	0.78	0.77	0.78	0.92	0.86	0.89	1.18

Scorecard applied to 1,000 bootstraps from the validation sample.

Errors (differences between estimates and observed values) are in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of  $\pm$  percentage points.

Errors and precision estimated from 1,000 bootstraps with  $n = 16,384$ .

Alpha is estimated from 1,000 bootstrap samples of  $n = 256, 512, 1,024, 2,048, 4,096, 8,192, \text{ and } 16,384$ .

**Table 8 (All poverty lines): Possible targeting outcomes**

		<u>Targeting segment</u>	
		<u>Targeted</u>	<u>Non-targeted</u>
<u>Observed poverty status</u>	<u>Poor</u>	<u>Inclusion</u> Poor correctly targeted	<u>Undercoverage</u> Poor mistakenly not targeted
	<u>Non-poor</u>	<u>Leakage</u> Non-poor mistakenly targeted	<u>Exclusion</u> Non-poor correctly not targeted

**Table 9 (100% of the national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	3.8	23.6	1.1	71.5	75.3	-68.4
<=32	7.6	19.9	3.3	69.2	76.8	-32.7
<=35	9.6	17.9	5.3	67.2	76.8	-10.8
<=38	12.0	15.4	7.8	64.8	76.8	+15.9
<=41	14.5	12.9	10.2	62.4	76.9	+43.2
<=44	16.7	10.8	13.2	59.4	76.0	+51.9
<=47	19.1	8.4	16.6	55.9	75.0	+39.5
<=50	20.9	6.6	20.2	52.3	73.2	+26.2
<=53	22.8	4.6	24.9	47.6	70.4	+9.2
<=55	23.5	3.9	27.6	45.0	68.5	-0.6
<=58	24.6	2.9	32.7	39.8	64.4	-19.2
<=60	25.3	2.1	37.0	35.6	60.9	-34.7
<=62	25.9	1.6	41.0	31.6	57.4	-49.3
<=64	26.1	1.3	44.7	27.9	54.0	-62.9
<=66	26.6	0.9	50.2	22.4	48.9	-82.9
<=69	26.9	0.6	55.7	16.9	43.8	-102.9
<=72	27.1	0.3	59.9	12.7	39.8	-118.3
<=75	27.3	0.1	64.4	8.2	35.5	-134.7
<=80	27.4	0.0	69.0	3.6	31.0	-151.3
<=100	27.4	0.0	72.6	0.0	27.4	-164.4

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.



**Table 10 (100% of the national line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	77.8	13.8	3.5:1
<=32	10.9	69.4	27.6	2.3:1
<=35	14.9	64.2	34.9	1.8:1
<=38	19.8	60.7	43.8	1.5:1
<=41	24.7	58.8	53.0	1.4:1
<=44	29.9	55.8	60.7	1.3:1
<=47	35.7	53.4	69.4	1.1:1
<=50	41.1	50.8	76.0	1.0:1
<=53	47.7	47.8	83.1	0.9:1
<=55	51.1	46.0	85.8	0.9:1
<=58	57.3	42.9	89.5	0.8:1
<=60	62.3	40.7	92.3	0.7:1
<=62	66.8	38.7	94.2	0.6:1
<=64	70.8	36.9	95.2	0.6:1
<=66	76.8	34.6	96.9	0.5:1
<=69	82.6	32.6	98.0	0.5:1
<=72	87.0	31.1	98.7	0.5:1
<=75	91.7	29.8	99.6	0.4:1
<=80	96.4	28.5	99.9	0.4:1
<=100	100.0	27.4	100.0	0.4:1

Scorecard applied to the validation sample.

**Tables for  
the Food Poverty Line**

**Table 3 (Food line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	40.3
26–32	17.0
33–35	12.7
36–38	8.7
39–41	8.0
42–44	7.1
45–47	5.4
48–50	3.5
51–53	2.2
54–55	1.9
56–58	1.9
59–60	1.8
61–62	1.7
63–64	0.6
65–66	0.6
67–69	0.5
70–72	0.4
73–75	0.1
76–80	0.0
81–100	0.0

**Table 5 (Food line): Errors in a household’s poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	+2.3	3.8	4.6	6.0
26–32	+4.9	1.7	2.1	2.7
33–35	+1.4	2.1	2.5	3.2
36–38	+4.4	1.0	1.2	1.7
39–41	+0.9	1.6	1.9	2.6
42–44	–1.1	1.9	2.3	2.9
45–47	–2.1	1.9	2.1	2.7
48–50	+1.8	0.6	0.7	0.9
51–53	–3.6	2.7	2.9	3.2
54–55	+1.0	0.6	0.7	0.9
56–58	+0.8	0.4	0.5	0.7
59–60	+1.4	0.3	0.3	0.4
61–62	+1.2	0.3	0.3	0.4
63–64	–0.4	0.6	0.7	0.9
65–66	+0.5	0.1	0.2	0.2
67–69	+0.5	0.0	0.0	0.0
70–72	+0.2	0.1	0.1	0.2
73–75	–0.5	0.5	0.5	0.7
76–80	0.0	0.0	0.0	0.0
81–100	0.0	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (Food line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-0.4	38.4	66.2	69.0
4	+0.2	16.2	22.6	33.5
8	-0.1	11.0	14.5	23.2
16	0.0	7.7	10.4	15.2
32	+0.1	6.0	7.1	10.1
64	+0.2	3.7	4.8	6.7
128	+0.3	2.8	3.4	4.6
256	+0.3	2.0	2.4	3.2
512	+0.3	1.4	1.7	2.3
1,024	+0.4	1.0	1.1	1.5
2,048	+0.4	0.7	0.8	1.1
4,096	+0.4	0.5	0.6	0.8
8,192	+0.4	0.4	0.4	0.6
16,384	+0.4	0.3	0.3	0.4

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (Food line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	1.9	4.2	2.9	90.9	92.8	+10.9
<=32	2.9	3.2	8.0	85.9	88.8	-30.1
<=35	3.5	2.6	11.4	82.5	86.0	-85.7
<=38	3.9	2.2	15.9	78.0	81.9	-158.4
<=41	4.5	1.7	20.3	73.6	78.0	-230.6
<=44	4.8	1.3	25.0	68.8	73.7	-307.9
<=47	5.2	0.9	30.4	63.4	68.7	-395.8
<=50	5.4	0.7	35.7	58.2	63.6	-481.6
<=53	5.7	0.4	42.0	51.8	57.5	-584.8
<=55	5.8	0.4	45.4	48.5	54.2	-639.5
<=58	5.9	0.2	51.4	42.5	48.4	-737.3
<=60	5.9	0.2	56.4	37.5	43.4	-818.6
<=62	6.0	0.1	60.8	33.0	39.0	-891.5
<=64	6.1	0.1	64.8	29.1	35.2	-955.5
<=66	6.1	0.0	70.7	23.2	29.3	-1,052.2
<=69	6.1	0.0	76.5	17.4	23.5	-1,146.1
<=72	6.1	0.0	80.9	13.0	19.1	-1,218.2
<=75	6.1	0.0	85.6	8.3	14.4	-1,294.9
<=80	6.1	0.0	90.3	3.6	9.7	-1,371.0
<=100	6.1	0.0	93.9	0.0	6.1	-1,429.8

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (Food line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	39.5	31.4	0.7:1
<=32	10.9	26.9	47.8	0.4:1
<=35	14.9	23.6	57.4	0.3:1
<=38	19.8	19.9	64.0	0.2:1
<=41	24.7	18.0	72.6	0.2:1
<=44	29.9	16.2	78.8	0.2:1
<=47	35.7	14.7	85.5	0.2:1
<=50	41.1	13.2	88.4	0.2:1
<=53	47.7	12.0	92.9	0.1:1
<=55	51.1	11.3	93.8	0.1:1
<=58	57.3	10.3	96.0	0.1:1
<=60	62.3	9.5	96.8	0.1:1
<=62	66.8	9.0	97.8	0.1:1
<=64	70.8	8.6	98.9	0.1:1
<=66	76.8	7.9	99.3	0.1:1
<=69	82.6	7.4	99.3	0.1:1
<=72	87.0	7.0	99.5	0.1:1
<=75	91.7	6.7	100.0	0.1:1
<=80	96.4	6.4	100.0	0.1:1
<=100	100.0	6.1	100.0	0.1:1

Scorecard applied to the validation sample.

**Tables for  
150% of the National Poverty Line**



**Table 3 (150% of the national line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0-25	95.5
26-32	90.0
33-35	85.1
36-38	82.4
39-41	79.5
42-44	75.4
45-47	68.6
48-50	65.1
51-53	59.6
54-55	52.5
56-58	46.7
59-60	44.0
61-62	44.0
63-64	39.3
65-66	28.7
67-69	26.6
70-72	22.2
73-75	16.5
76-80	11.5
81-100	4.5

**Table 5 (150% of the national line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+1.8	2.1	2.5	3.0
26-32	+4.6	2.3	2.9	3.8
33-35	-0.7	2.6	3.0	3.8
36-38	-7.9	4.7	4.9	5.1
39-41	-4.5	3.6	3.8	4.2
42-44	+0.4	2.9	3.5	4.3
45-47	-8.2	5.5	5.7	6.1
48-50	-3.1	3.3	3.8	5.1
51-53	-5.0	4.4	4.6	5.5
54-55	-3.9	4.4	5.2	6.8
56-58	-1.1	3.8	4.4	5.9
59-60	+7.2	3.7	4.4	5.5
61-62	-2.4	4.3	5.2	6.9
63-64	-7.7	6.3	6.9	8.2
65-66	-5.0	4.4	4.8	5.8
67-69	+9.3	2.2	2.7	3.4
70-72	+8.2	2.8	3.4	4.7
73-75	+4.1	2.1	2.7	3.6
76-80	+6.6	1.1	1.3	1.7
81-100	-0.1	1.8	2.1	2.8

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (150% of the national line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+0.5	70.0	76.4	86.8
4	+0.4	39.3	46.9	58.5
8	-0.2	31.9	36.5	49.4
16	+0.3	23.6	27.9	33.8
32	0.0	17.0	19.7	24.5
64	-0.2	11.6	13.8	19.4
128	-0.2	8.1	10.2	13.4
256	-0.3	5.8	7.0	9.0
512	-0.2	4.2	4.9	6.3
1,024	-0.1	3.0	3.6	4.8
2,048	-0.1	2.1	2.6	3.5
4,096	-0.1	1.5	1.8	2.2
8,192	-0.1	1.1	1.3	1.6
16,384	-0.1	0.8	0.9	1.2

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (150% of the national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.6	48.1	0.3	47.0	51.6	-82.0
<=32	9.8	42.9	1.1	46.1	55.9	-60.7
<=35	13.2	39.6	1.7	45.5	58.7	-46.8
<=38	17.3	35.5	2.5	44.8	62.1	-29.7
<=41	21.2	31.5	3.5	43.7	64.9	-12.9
<=44	25.0	27.7	4.9	42.4	67.4	+4.0
<=47	29.1	23.7	6.6	40.6	69.7	+22.7
<=50	32.5	20.2	8.6	38.7	71.2	+39.6
<=53	36.7	16.0	11.0	36.2	72.9	+60.1
<=55	38.6	14.2	12.6	34.7	73.2	+70.0
<=58	41.4	11.3	15.9	31.4	72.8	+69.9
<=60	43.5	9.3	18.8	28.4	71.9	+64.3
<=62	45.6	7.1	21.2	26.0	71.7	+59.8
<=64	47.1	5.6	23.7	23.5	70.7	+55.1
<=66	49.0	3.8	27.8	19.5	68.5	+47.3
<=69	50.4	2.3	32.1	15.1	65.5	+39.1
<=72	51.2	1.5	35.8	11.5	62.7	+32.2
<=75	52.0	0.7	39.7	7.5	59.6	+24.7
<=80	52.5	0.2	43.9	3.4	55.9	+16.9
<=100	52.7	0.0	47.3	0.0	52.7	+10.4

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (150% of the national line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

<b>Targeting cut-off</b>	<b>% all HHs who are targeted</b>	<b>% targeted HHs who are poor</b>	<b>% poor HHs who are targeted</b>	<b>Poor HHs targeted per non-poor HH targeted</b>
<=25	4.9	94.7	8.8	17.8:1
<=32	10.9	89.8	18.6	8.8:1
<=35	14.9	88.3	25.0	7.5:1
<=38	19.8	87.4	32.8	6.9:1
<=41	24.7	85.8	40.2	6.0:1
<=44	29.9	83.7	47.4	5.1:1
<=47	35.7	81.5	55.1	4.4:1
<=50	41.1	79.2	61.7	3.8:1
<=53	47.7	76.9	69.6	3.3:1
<=55	51.1	75.4	73.1	3.1:1
<=58	57.3	72.3	78.5	2.6:1
<=60	62.3	69.8	82.5	2.3:1
<=62	66.8	68.3	86.5	2.2:1
<=64	70.8	66.5	89.3	2.0:1
<=66	76.8	63.8	92.9	1.8:1
<=69	82.6	61.1	95.6	1.6:1
<=72	87.0	58.9	97.1	1.4:1
<=75	91.7	56.7	98.6	1.3:1
<=80	96.4	54.5	99.6	1.2:1
<=100	100.0	52.7	100.0	1.1:1

Scorecard applied to the validation sample.

**Tables for  
200% of the National Poverty Line**

**Table 3 (200% of the national line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0-25	99.0
26-32	96.9
33-35	95.1
36-38	93.8
39-41	91.7
42-44	90.7
45-47	87.1
48-50	82.3
51-53	80.5
54-55	77.1
56-58	70.7
59-60	68.3
61-62	67.3
63-64	62.0
65-66	52.3
67-69	51.6
70-72	45.3
73-75	34.7
76-80	29.3
81-100	10.4

**Table 5 (200% of the national line): Errors in a household’s poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	+0.4	0.8	0.9	1.2
26–32	+3.8	1.7	2.1	2.9
33–35	-1.0	1.2	1.4	1.9
36–38	-1.9	1.5	1.5	1.7
39–41	-3.9	2.4	2.5	2.7
42–44	-1.1	1.7	1.9	2.6
45–47	-5.9	3.5	3.6	3.8
48–50	-5.2	3.7	3.8	4.1
51–53	+0.7	3.6	4.2	5.8
54–55	-1.8	3.4	4.0	5.3
56–58	-6.5	4.5	4.8	5.2
59–60	-0.5	3.5	4.0	5.6
61–62	+5.0	4.0	5.1	6.7
63–64	-7.0	5.6	5.9	6.5
65–66	-6.2	4.8	5.0	5.7
67–69	-0.8	3.7	4.4	5.5
70–72	+21.0	3.3	3.9	5.2
73–75	-4.5	4.2	4.7	6.1
76–80	+9.5	3.3	3.9	4.9
81–100	-3.4	3.1	3.4	4.4

Scorecard applied to 1,000 bootstraps from the validation sample.



**Table 6 (200% of the national line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+0.1	62.7	73.8	93.3
4	-0.5	39.6	47.3	59.5
8	-0.5	32.0	36.7	47.8
16	-0.2	23.2	28.0	34.8
32	-0.2	16.8	20.0	24.8
64	-0.4	11.8	14.2	17.9
128	-0.5	8.5	9.9	12.1
256	-0.5	6.0	7.0	9.6
512	-0.4	4.2	5.2	6.6
1,024	-0.3	3.1	3.6	4.7
2,048	-0.3	2.2	2.6	3.3
4,096	-0.4	1.5	1.8	2.4
8,192	-0.3	1.1	1.3	1.6
16,384	-0.3	0.8	0.9	1.2

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (200% of the national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

<b>Targeting cut-off</b>	<b>Inclusion: Poor correctly targeted</b>	<b>Undercoverage: Poor mistakenly not targeted</b>	<b>Leakage: Non-poor mistakenly targeted</b>	<b>Exclusion: Non-poor correctly not targeted</b>	<b>Hit rate Inclusion + Exclusion</b>	<b>BPAC See text</b>
<=25	4.8	65.6	0.1	29.6	34.4	-86.2
<=32	10.5	59.9	0.4	29.2	39.7	-69.6
<=35	14.3	56.1	0.6	29.0	43.3	-58.5
<=38	18.8	51.6	1.0	28.7	47.5	-45.2
<=41	23.3	47.0	1.4	28.2	51.6	-31.7
<=44	28.0	42.4	1.9	27.8	55.7	-17.8
<=47	33.1	37.3	2.6	27.1	60.2	-2.3
<=50	37.7	32.7	3.4	26.2	63.9	+12.0
<=53	43.2	27.2	4.6	25.1	68.2	+29.2
<=55	45.8	24.6	5.4	24.3	70.0	+37.7
<=58	50.1	20.3	7.2	22.5	72.6	+52.6
<=60	53.5	16.9	8.8	20.8	74.3	+64.5
<=62	56.4	13.9	10.4	19.2	75.7	+75.2
<=64	58.9	11.4	11.9	17.7	76.7	+83.1
<=66	62.0	8.4	14.8	14.8	76.8	+78.9
<=69	64.9	5.4	17.6	12.0	76.9	+74.9
<=72	66.5	3.8	20.5	9.2	75.7	+70.9
<=75	68.5	1.9	23.3	6.4	74.8	+66.9
<=80	69.7	0.7	26.7	2.9	72.6	+62.1
<=100	70.4	0.0	29.6	0.0	70.4	+57.9

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (200% of the national line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

<b>Targeting cut-off</b>	<b>% all HHs who are targeted</b>	<b>% targeted HHs who are poor</b>	<b>% poor HHs who are targeted</b>	<b>Poor HHs targeted per non-poor HH targeted</b>
<=25	4.9	98.5	6.8	67.7:1
<=32	10.9	95.9	14.9	23.7:1
<=35	14.9	95.7	20.3	22.0:1
<=38	19.8	95.0	26.7	19.1:1
<=41	24.7	94.3	33.2	16.6:1
<=44	29.9	93.7	39.8	14.8:1
<=47	35.7	92.8	47.0	12.9:1
<=50	41.1	91.7	53.5	11.0:1
<=53	47.7	90.4	61.3	9.4:1
<=55	51.1	89.5	65.0	8.5:1
<=58	57.3	87.5	71.2	7.0:1
<=60	62.3	85.8	76.0	6.0:1
<=62	66.8	84.4	80.2	5.4:1
<=64	70.8	83.2	83.8	5.0:1
<=66	76.8	80.7	88.1	4.2:1
<=69	82.6	78.6	92.3	3.7:1
<=72	87.0	76.5	94.5	3.3:1
<=75	91.7	74.6	97.3	2.9:1
<=80	96.4	72.3	99.1	2.6:1
<=100	100.0	70.4	100.0	2.4:1

Scorecard applied to the validation sample.

**Tables for  
\$1.25/day 2005 PPP Poverty Line**

**Table 3 (\$1.25/day 2005 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	87.6
26–32	77.2
33–35	65.1
36–38	59.4
39–41	53.6
42–44	48.1
45–47	37.2
48–50	31.7
51–53	23.9
54–55	19.4
56–58	16.8
59–60	9.7
61–62	8.4
63–64	4.7
65–66	4.4
67–69	3.6
70–72	3.1
73–75	1.6
76–80	0.8
81–100	0.5

**Table 5 (\$1.25/day 2005 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	-2.9	2.4	2.6	3.1
26-32	+15.8	3.8	4.4	5.7
33-35	+10.9	4.3	5.2	6.9
36-38	+15.7	4.4	5.2	7.3
39-41	+5.4	4.7	5.6	7.4
42-44	+0.1	3.4	3.9	5.5
45-47	-2.9	3.9	4.6	5.9
48-50	+7.0	2.7	3.4	4.7
51-53	+2.0	2.8	3.4	4.1
54-55	-3.1	3.9	4.7	6.0
56-58	+4.9	1.8	2.2	3.0
59-60	+0.5	2.0	2.4	3.1
61-62	+5.2	0.7	0.9	1.2
63-64	+1.5	0.9	1.0	1.3
65-66	+2.6	0.6	0.7	0.8
67-69	+2.4	0.4	0.5	0.6
70-72	+2.8	0.2	0.3	0.3
73-75	-0.5	0.9	1.0	1.3
76-80	+0.6	0.1	0.1	0.2
81-100	+0.5	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (\$1.25/day 2005 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-1.8	60.9	73.5	86.4
4	+0.9	33.4	44.9	57.4
8	+1.6	23.4	29.6	41.6
16	+2.4	16.3	20.1	26.9
32	+2.7	11.8	14.4	18.4
64	+2.9	8.4	10.1	14.4
128	+3.0	6.0	7.3	9.7
256	+3.1	4.3	5.2	6.6
512	+3.1	3.0	3.4	4.5
1,024	+3.2	2.0	2.5	3.2
2,048	+3.2	1.5	1.8	2.4
4,096	+3.2	1.0	1.2	1.7
8,192	+3.2	0.8	0.9	1.2
16,384	+3.2	0.5	0.6	0.8

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$1.25/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<u>Inclusion:</u> Poor correctly targeted	<u>Undercoverage:</u> Poor mistakenly not targeted	<u>Leakage:</u> Non-poor mistakenly targeted	<u>Exclusion:</u> Non-poor correctly not targeted	<u>Hit rate</u> Inclusion + Exclusion	<u>BPAC</u> See text
<=25	4.3	24.4	0.5	70.7	75.0	-68.0
<=32	8.6	20.2	2.3	68.9	77.5	-32.1
<=35	11.2	17.6	3.8	67.5	78.6	-9.3
<=38	14.1	14.7	5.7	65.5	79.6	+17.7
<=41	16.8	12.0	7.9	63.3	80.1	+44.5
<=44	19.3	9.5	10.6	60.7	80.0	+63.2
<=47	21.6	7.2	14.1	57.2	78.7	+51.0
<=50	23.2	5.6	17.9	53.3	76.5	+37.8
<=53	25.0	3.7	22.7	48.5	73.5	+21.0
<=55	25.8	3.0	25.4	45.9	71.6	+11.8
<=58	26.9	1.9	30.4	40.9	67.7	-5.7
<=60	27.4	1.3	34.9	36.4	63.8	-21.2
<=62	27.8	0.9	39.0	32.2	60.1	-35.7
<=64	28.1	0.6	42.7	28.5	56.7	-48.5
<=66	28.4	0.4	48.4	22.8	51.2	-68.4
<=69	28.5	0.2	54.0	17.2	45.8	-87.8
<=72	28.6	0.2	58.4	12.9	41.5	-103.0
<=75	28.7	0.0	63.0	8.2	37.0	-119.0
<=80	28.8	0.0	67.6	3.6	32.4	-135.2
<=100	28.8	0.0	71.2	0.0	28.8	-147.7

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.



**Table 10 (\$1.25/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	88.9	15.1	8.0:1
<=32	10.9	78.8	29.9	3.7:1
<=35	14.9	74.8	38.8	3.0:1
<=38	19.8	71.1	48.9	2.5:1
<=41	24.7	67.9	58.4	2.1:1
<=44	29.9	64.6	67.1	1.8:1
<=47	35.7	60.5	75.0	1.5:1
<=50	41.1	56.5	80.7	1.3:1
<=53	47.7	52.4	87.0	1.1:1
<=55	51.1	50.4	89.6	1.0:1
<=58	57.3	46.9	93.4	0.9:1
<=60	62.3	44.0	95.4	0.8:1
<=62	66.8	41.6	96.8	0.7:1
<=64	70.8	39.7	97.8	0.7:1
<=66	76.8	36.9	98.6	0.6:1
<=69	82.6	34.6	99.2	0.5:1
<=72	87.0	32.9	99.5	0.5:1
<=75	91.7	31.3	99.9	0.5:1
<=80	96.4	29.8	100.0	0.4:1
<=100	100.0	28.8	100.0	0.4:1

Scorecard applied to the validation sample.

**Tables for  
\$2.00/day 2005 PPP Poverty Line**

**Table 3 (\$2.00/day 2005 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	98.8
26–32	95.5
33–35	92.4
36–38	90.6
39–41	87.4
42–44	84.2
45–47	76.0
48–50	69.1
51–53	64.4
54–55	54.9
56–58	48.4
59–60	39.4
61–62	35.8
63–64	27.6
65–66	19.1
67–69	19.1
70–72	14.8
73–75	10.3
76–80	6.4
81–100	2.4

**Table 5 (\$2.00/day 2005 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+0.2	0.8	0.9	1.2
26-32	+4.3	2.0	2.4	3.3
33-35	-1.8	1.7	1.8	2.5
36-38	-2.3	1.9	2.0	2.5
39-41	-1.9	2.5	2.9	3.8
42-44	-2.0	2.2	2.6	3.3
45-47	-5.9	4.2	4.4	5.0
48-50	-1.8	3.2	3.8	5.1
51-53	+5.6	3.9	4.6	6.4
54-55	+4.9	4.4	5.2	7.0
56-58	+19.4	2.8	3.4	4.5
59-60	+10.4	2.9	3.6	4.7
61-62	+6.7	3.9	4.7	6.0
63-64	+14.0	2.2	2.6	3.5
65-66	+0.2	2.4	2.9	3.8
67-69	+7.6	1.9	2.2	2.9
70-72	+9.2	1.4	1.7	2.2
73-75	-0.3	2.1	2.5	3.3
76-80	+3.5	0.8	0.9	1.2
81-100	+1.2	0.5	0.7	0.9

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (\$2.00/day 2005 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+0.6	66.6	78.4	92.6
4	+1.7	35.8	43.7	58.2
8	+2.8	28.0	33.1	42.2
16	+3.7	18.8	22.4	31.1
32	+4.1	14.2	17.1	22.6
64	+4.2	10.1	11.7	15.7
128	+4.2	6.8	8.2	10.9
256	+4.2	4.8	6.0	8.0
512	+4.1	3.5	4.1	5.4
1,024	+4.2	2.6	3.2	4.1
2,048	+4.2	1.8	2.2	2.9
4,096	+4.2	1.3	1.5	2.0
8,192	+4.2	0.9	1.0	1.4
16,384	+4.2	0.6	0.8	1.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$2.00/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.8	48.1	0.1	47.0	51.8	-81.7
<=32	10.4	42.6	0.5	46.5	56.9	-59.8
<=35	14.1	38.9	0.8	46.2	60.3	-45.2
<=38	18.4	34.5	1.3	45.7	64.1	-27.8
<=41	22.8	30.2	2.0	45.1	67.9	-10.2
<=44	27.1	25.8	2.7	44.3	71.5	+7.7
<=47	31.7	21.2	3.9	43.1	74.9	+27.3
<=50	35.5	17.5	5.6	41.4	76.9	+44.7
<=53	39.8	13.2	7.9	39.1	78.9	+65.3
<=55	41.6	11.3	9.5	37.6	79.2	+75.2
<=58	44.4	8.5	12.9	34.2	78.6	+75.7
<=60	46.3	6.6	16.0	31.1	77.4	+69.9
<=62	47.9	5.0	18.9	28.1	76.1	+64.3
<=64	49.0	4.0	21.9	25.2	74.2	+58.7
<=66	50.4	2.6	26.4	20.7	71.0	+50.1
<=69	51.4	1.6	31.2	15.9	67.3	+41.1
<=72	51.9	1.1	35.1	12.0	63.8	+33.7
<=75	52.5	0.4	39.2	7.8	60.4	+26.0
<=80	52.8	0.1	43.5	3.5	56.3	+17.7
<=100	52.9	0.0	47.1	0.0	52.9	+11.1

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (\$2.00/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	98.5	9.1	65.2:1
<=32	10.9	95.1	19.6	19.5:1
<=35	14.9	94.5	26.6	17.2:1
<=38	19.8	93.2	34.8	13.7:1
<=41	24.7	92.1	43.0	11.6:1
<=44	29.9	90.9	51.3	9.9:1
<=47	35.7	89.0	60.0	8.1:1
<=50	41.1	86.3	67.0	6.3:1
<=53	47.7	83.4	75.1	5.0:1
<=55	51.1	81.4	78.6	4.4:1
<=58	57.3	77.6	83.9	3.5:1
<=60	62.3	74.4	87.5	2.9:1
<=62	66.8	71.7	90.5	2.5:1
<=64	70.8	69.1	92.5	2.2:1
<=66	76.8	65.6	95.2	1.9:1
<=69	82.6	62.3	97.1	1.6:1
<=72	87.0	59.7	98.0	1.5:1
<=75	91.7	57.3	99.2	1.3:1
<=80	96.4	54.8	99.8	1.2:1
<=100	100.0	52.9	100.0	1.1:1

Scorecard applied to the validation sample.

**Tables for  
\$2.50/day 2005 PPP Poverty Line**



**Table 3 (\$2.50/day 2005 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	99.7
26–32	98.8
33–35	98.1
36–38	96.4
39–41	94.8
42–44	93.0
45–47	88.7
48–50	82.7
51–53	77.7
54–55	72.4
56–58	63.4
59–60	55.3
61–62	53.1
63–64	49.4
65–66	35.8
67–69	35.8
70–72	27.8
73–75	19.3
76–80	15.8
81–100	5.7

**Table 5 (\$2.50/day 2005 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+1.0	0.8	0.9	1.2
26-32	+3.5	1.6	1.9	2.6
33-35	-0.2	0.7	0.8	1.1
36-38	-1.2	1.0	1.0	1.3
39-41	-2.6	1.6	1.7	1.8
42-44	-2.7	1.9	2.0	2.2
45-47	-5.0	3.1	3.1	3.4
48-50	-0.5	2.7	3.1	4.1
51-53	+8.7	3.9	4.7	6.1
54-55	-13.8	8.0	8.3	8.6
56-58	+1.7	3.7	4.3	5.9
59-60	+12.4	3.9	4.6	6.1
61-62	+7.0	4.2	4.8	6.1
63-64	+20.1	3.6	4.3	5.6
65-66	+0.6	3.8	4.3	5.6
67-69	+14.2	2.5	2.9	3.8
70-72	+18.0	1.7	2.0	2.7
73-75	+5.4	2.2	2.8	3.5
76-80	+10.0	1.2	1.4	1.8
81-100	+3.3	0.8	0.9	1.2

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (\$2.50/day 2005 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+2.0	68.3	77.4	91.2
4	+3.8	36.0	42.4	56.6
8	+3.7	27.8	34.7	44.4
16	+4.8	21.3	25.3	34.3
32	+4.9	15.6	18.7	24.7
64	+5.1	10.9	13.0	17.2
128	+5.0	7.8	9.6	12.9
256	+5.0	5.7	6.8	8.9
512	+5.1	3.8	4.5	5.8
1,024	+5.1	2.8	3.4	4.4
2,048	+5.2	2.0	2.4	3.3
4,096	+5.2	1.3	1.7	2.0
8,192	+5.2	1.0	1.2	1.6
16,384	+5.2	0.7	0.8	1.1

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$2.50/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.8	59.4	0.1	35.7	40.6	-84.9
<=32	10.6	53.5	0.3	35.5	46.2	-66.4
<=35	14.6	49.6	0.4	35.4	50.0	-54.1
<=38	19.2	45.0	0.6	35.2	54.5	-39.2
<=41	23.9	40.3	0.8	35.0	58.9	-24.2
<=44	28.8	35.4	1.1	34.7	63.5	-8.6
<=47	34.0	30.2	1.7	34.1	68.1	+8.5
<=50	38.5	25.7	2.6	33.2	71.7	+24.0
<=53	43.7	20.5	4.0	31.8	75.5	+42.4
<=55	46.4	17.8	4.7	31.1	77.5	+51.9
<=58	50.5	13.7	6.8	29.0	79.5	+67.9
<=60	53.2	11.0	9.1	26.7	79.8	+79.9
<=62	55.6	8.6	11.2	24.6	80.2	+82.5
<=64	57.4	6.8	13.4	22.4	79.9	+79.1
<=66	59.6	4.6	17.2	18.6	78.1	+73.2
<=69	61.4	2.8	21.2	14.6	76.0	+67.0
<=72	62.3	1.9	24.7	11.2	73.5	+61.6
<=75	63.3	0.9	28.4	7.4	70.7	+55.7
<=80	64.0	0.2	32.4	3.4	67.4	+49.5
<=100	64.2	0.0	35.8	0.0	64.2	+44.2

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (\$2.50/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	98.8	7.5	82.5:1
<=32	10.9	97.6	16.6	40.4:1
<=35	14.9	97.5	22.7	39.7:1
<=38	19.8	97.1	29.9	33.9:1
<=41	24.7	96.7	37.3	29.0:1
<=44	29.9	96.4	44.8	26.5:1
<=47	35.7	95.2	52.9	19.9:1
<=50	41.1	93.7	60.0	14.9:1
<=53	47.7	91.5	68.1	10.8:1
<=55	51.1	90.8	72.3	9.8:1
<=58	57.3	88.2	78.7	7.5:1
<=60	62.3	85.3	82.8	5.8:1
<=62	66.8	83.2	86.6	5.0:1
<=64	70.8	81.1	89.5	4.3:1
<=66	76.8	77.6	92.8	3.5:1
<=69	82.6	74.4	95.6	2.9:1
<=72	87.0	71.7	97.1	2.5:1
<=75	91.7	69.0	98.6	2.2:1
<=80	96.4	66.4	99.7	2.0:1
<=100	100.0	64.2	100.0	1.8:1

Scorecard applied to the validation sample.

**Tables for  
\$5.00/day 2005 PPP Poverty Line**

**Table 3 (\$5.00/day 2005 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	100.0
26–32	99.9
33–35	99.9
36–38	99.9
39–41	99.8
42–44	99.8
45–47	99.4
48–50	98.4
51–53	98.2
54–55	98.2
56–58	96.4
59–60	92.2
61–62	92.0
63–64	92.0
65–66	82.4
67–69	81.5
70–72	79.6
73–75	68.5
76–80	63.6
81–100	35.6

**Table 5 (\$5.00/day 2005 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	0.0	0.0	0.0	0.0
26-32	0.0	0.1	0.1	0.2
33-35	-0.1	0.0	0.0	0.0
36-38	0.0	0.1	0.2	0.2
39-41	+0.2	0.3	0.4	0.5
42-44	+0.8	0.7	0.8	1.1
45-47	-0.3	0.3	0.3	0.4
48-50	-0.9	0.6	0.7	0.7
51-53	-0.8	0.6	0.6	0.7
54-55	-0.6	0.6	0.6	0.9
56-58	-1.3	1.0	1.0	1.1
59-60	+1.9	2.1	2.4	3.3
61-62	+7.8	3.4	4.0	5.4
63-64	+3.1	2.4	2.7	4.0
65-66	+7.1	2.8	3.3	4.3
67-69	-3.6	2.9	3.2	3.5
70-72	+20.7	4.6	5.4	7.1
73-75	-10.2	6.6	7.0	7.5
76-80	+23.2	4.2	5.1	6.7
81-100	+8.8	3.8	4.5	5.6

Scorecard applied to 1,000 bootstraps from the validation sample.



**Table 6 (\$5.00/day 2005 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-0.6	50.0	58.9	78.3
4	+2.3	34.6	42.2	52.1
8	+2.7	25.5	30.2	39.5
16	+3.2	19.3	22.7	29.1
32	+3.5	14.1	17.1	20.5
64	+3.4	9.7	12.3	15.2
128	+3.4	7.1	8.5	11.3
256	+3.4	5.0	5.9	7.7
512	+3.4	3.6	4.2	5.4
1,024	+3.4	2.6	3.1	3.8
2,048	+3.3	1.8	2.1	2.7
4,096	+3.3	1.2	1.5	1.8
8,192	+3.3	0.9	1.1	1.4
16,384	+3.3	0.7	0.8	1.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$5.00/day 2005 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

<b>Targeting cut-off</b>	<b>Inclusion: Poor correctly targeted</b>	<b>Undercoverage: Poor mistakenly not targeted</b>	<b>Leakage: Non-poor mistakenly targeted</b>	<b>Exclusion: Non-poor correctly not targeted</b>	<b>Hit rate Inclusion + Exclusion</b>	<b>BPAC See text</b>
<=25	4.9	84.5	0.0	10.6	15.5	-89.1
<=32	10.9	78.5	0.0	10.6	21.5	-75.6
<=35	14.9	74.5	0.0	10.6	25.5	-66.6
<=38	19.8	69.6	0.0	10.6	30.4	-55.7
<=41	24.7	64.7	0.1	10.6	35.3	-44.7
<=44	29.8	59.6	0.1	10.5	40.3	-33.3
<=47	35.5	53.8	0.1	10.5	46.0	-20.3
<=50	40.9	48.4	0.2	10.5	51.4	-8.2
<=53	47.4	41.9	0.3	10.3	57.8	+6.5
<=55	50.8	38.6	0.4	10.3	61.0	+14.0
<=58	56.7	32.7	0.6	10.0	66.7	+27.5
<=60	61.3	28.1	1.0	9.6	70.9	+38.3
<=62	65.4	24.0	1.5	9.2	74.5	+47.9
<=64	68.9	20.4	1.9	8.7	77.6	+56.4
<=66	73.5	15.8	3.3	7.4	80.9	+68.2
<=69	78.4	10.9	4.1	6.5	84.9	+80.1
<=72	81.5	7.8	5.5	5.2	86.7	+88.6
<=75	85.2	4.2	6.5	4.1	89.3	+92.7
<=80	87.9	1.5	8.5	2.1	90.0	+90.5
<=100	89.4	0.0	10.6	0.0	89.4	+88.1

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (\$5.00/day 2005 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	100.0	5.5	Only poor targeted
<=32	10.9	99.9	12.2	885.6:1
<=35	14.9	99.9	16.7	1,211.0:1
<=38	19.8	99.9	22.1	820.4:1
<=41	24.7	99.8	27.6	413.3:1
<=44	29.9	99.7	33.3	300.0:1
<=47	35.7	99.6	39.8	267.5:1
<=50	41.1	99.6	45.8	223.7:1
<=53	47.7	99.4	53.1	160.1:1
<=55	51.1	99.3	56.8	137.1:1
<=58	57.3	99.0	63.4	95.6:1
<=60	62.3	98.4	68.6	61.1:1
<=62	66.8	97.8	73.1	44.3:1
<=64	70.8	97.3	77.1	36.0:1
<=66	76.8	95.8	82.3	22.5:1
<=69	82.6	95.0	87.8	18.9:1
<=72	87.0	93.7	91.2	14.9:1
<=75	91.7	92.9	95.4	13.1:1
<=80	96.4	91.2	98.4	10.3:1
<=100	100.0	89.4	100.0	8.4:1

Scorecard applied to the validation sample.

**Tables for  
\$1.90/day 2011 PPP Poverty Line**

**Table 3 (\$1.90/day 2011 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	82.6
26–32	65.6
33–35	56.3
36–38	48.7
39–41	43.3
42–44	36.5
45–47	27.0
48–50	22.0
51–53	15.4
54–55	11.2
56–58	10.3
59–60	7.1
61–62	6.4
63–64	2.6
65–66	2.6
67–69	2.2
70–72	1.6
73–75	0.8
76–80	0.4
81–100	0.3

**Table 5 (\$1.90/day 2011 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+0.1	2.8	3.3	4.3
26-32	+15.0	3.6	4.3	5.7
33-35	+12.4	4.0	4.7	6.4
36-38	+14.2	4.0	4.7	6.7
39-41	+6.2	4.3	5.2	6.8
42-44	+2.9	3.2	3.8	4.9
45-47	-9.6	6.9	7.2	7.8
48-50	+5.4	2.4	2.8	3.9
51-53	+2.7	2.2	2.7	3.6
54-55	-5.7	4.7	5.1	5.9
56-58	+3.3	1.4	1.7	2.1
59-60	+4.9	0.7	0.8	1.1
61-62	+4.2	0.6	0.7	1.0
63-64	+0.2	0.8	0.9	1.2
65-66	+1.6	0.4	0.5	0.6
67-69	+1.3	0.4	0.5	0.6
70-72	+1.3	0.2	0.2	0.3
73-75	+0.1	0.5	0.5	0.7
76-80	+0.3	0.1	0.1	0.1
81-100	+0.3	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (\$1.90/day 2011 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-1.8	60.8	75.1	89.0
4	+0.5	32.3	40.9	57.5
8	+1.3	21.4	27.4	39.0
16	+2.0	15.1	19.2	26.9
32	+2.2	10.9	13.6	16.7
64	+2.4	7.6	9.0	12.0
128	+2.5	5.6	6.7	9.2
256	+2.6	3.8	4.6	6.0
512	+2.6	2.7	3.3	4.0
1,024	+2.7	1.9	2.3	2.7
2,048	+2.7	1.3	1.5	2.2
4,096	+2.7	0.9	1.1	1.5
8,192	+2.7	0.7	0.8	1.1
16,384	+2.7	0.5	0.6	0.8

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$1.90/day 2011 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.0	18.3	0.9	76.8	80.8	-60.3
<=32	7.6	14.7	3.3	74.4	82.1	-16.8
<=35	9.7	12.6	5.3	72.4	82.1	+10.2
<=38	12.0	10.3	7.8	69.9	81.9	+42.5
<=41	14.1	8.2	10.6	67.1	81.2	+52.3
<=44	16.0	6.3	13.9	63.8	79.7	+37.6
<=47	17.9	4.4	17.8	59.9	77.8	+20.2
<=50	19.0	3.3	22.1	55.6	74.6	+0.8
<=53	20.0	2.3	27.7	50.0	70.0	-24.1
<=55	20.5	1.8	30.6	47.1	67.6	-37.2
<=58	21.2	1.1	36.0	41.7	62.9	-61.6
<=60	21.5	0.8	40.8	36.9	58.3	-83.0
<=62	21.7	0.6	45.1	32.6	54.3	-102.2
<=64	22.0	0.4	48.9	28.8	50.8	-119.1
<=66	22.1	0.2	54.7	23.0	45.1	-145.3
<=69	22.2	0.1	60.4	17.3	39.5	-170.6
<=72	22.2	0.1	64.7	13.0	35.2	-190.3
<=75	22.3	0.0	69.4	8.3	30.6	-211.3
<=80	22.3	0.0	74.1	3.6	25.9	-232.2
<=100	22.3	0.0	77.7	0.0	22.3	-248.3

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.



**Table 10 (\$1.90/day 2011 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	81.6	17.8	4.4:1
<=32	10.9	70.0	34.2	2.3:1
<=35	14.9	64.7	43.3	1.8:1
<=38	19.8	60.7	53.8	1.5:1
<=41	24.7	57.0	63.2	1.3:1
<=44	29.9	53.4	71.5	1.1:1
<=47	35.7	50.1	80.1	1.0:1
<=50	41.1	46.2	85.1	0.9:1
<=53	47.7	42.0	89.8	0.7:1
<=55	51.1	40.2	92.1	0.7:1
<=58	57.3	37.1	95.2	0.6:1
<=60	62.3	34.5	96.3	0.5:1
<=62	66.8	32.5	97.5	0.5:1
<=64	70.8	31.0	98.4	0.4:1
<=66	76.8	28.8	99.0	0.4:1
<=69	82.6	26.9	99.5	0.4:1
<=72	87.0	25.6	99.7	0.3:1
<=75	91.7	24.3	100.0	0.3:1
<=80	96.4	23.1	100.0	0.3:1
<=100	100.0	22.3	100.0	0.3:1

Scorecard applied to the validation sample.

**Tables for  
\$3.20/day 2011 PPP Poverty Line**

**Table 3 (\$3.20/day 2011 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	98.1
26–32	93.9
33–35	90.3
36–38	88.5
39–41	84.5
42–44	79.0
45–47	70.3
48–50	63.6
51–53	57.0
54–55	45.0
56–58	42.6
59–60	32.6
61–62	30.3
63–64	20.2
65–66	15.1
67–69	15.1
70–72	10.9
73–75	7.3
76–80	4.7
81–100	2.4

**Table 5 (\$3.20/day 2011 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	-0.3	0.8	1.0	1.3
26-32	+3.9	2.1	2.5	3.4
33-35	-1.7	1.9	2.4	3.1
36-38	-3.5	2.5	2.7	2.9
39-41	-1.7	2.7	3.1	4.2
42-44	-2.3	2.5	3.0	3.8
45-47	+0.4	3.3	4.1	5.2
48-50	+12.3	3.7	4.3	5.6
51-53	+15.6	3.6	4.3	5.7
54-55	-2.7	4.3	5.2	6.9
56-58	+20.8	2.3	2.8	3.7
59-60	+8.9	2.8	3.3	4.1
61-62	+19.3	1.7	2.0	2.7
63-64	+10.8	1.7	2.0	2.5
65-66	+2.1	1.9	2.3	2.8
67-69	+8.7	1.2	1.4	1.9
70-72	+6.3	1.3	1.6	2.1
73-75	0.0	1.6	1.9	2.8
76-80	+2.5	0.7	0.8	1.0
81-100	+1.6	0.4	0.5	0.6

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (\$3.20/day 2011 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+0.6	65.5	82.0	93.3
4	+2.7	35.6	44.3	58.2
8	+3.9	26.1	32.0	42.8
16	+5.3	18.5	21.8	30.1
32	+5.7	13.9	16.0	20.1
64	+6.0	9.1	10.8	15.4
128	+6.0	6.5	7.8	10.4
256	+6.1	4.5	5.2	7.4
512	+6.1	3.1	3.9	5.1
1,024	+6.1	2.3	2.9	3.7
2,048	+6.2	1.6	1.9	2.4
4,096	+6.2	1.1	1.3	1.8
8,192	+6.2	0.8	1.0	1.3
16,384	+6.2	0.6	0.7	0.9

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$3.20/day 2011 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

<b>Targeting cut-off</b>	<b>Inclusion: Poor correctly targeted</b>	<b>Undercoverage: Poor mistakenly not targeted</b>	<b>Leakage: Non-poor mistakenly targeted</b>	<b>Exclusion: Non-poor correctly not targeted</b>	<b>Hit rate Inclusion + Exclusion</b>	<b>BPAC See text</b>
<=25	4.8	43.4	0.1	51.7	56.5	-80.0
<=32	10.3	37.9	0.7	51.2	61.4	-56.0
<=35	13.9	34.3	1.0	50.8	64.7	-40.2
<=38	18.2	30.0	1.6	50.2	68.4	-21.2
<=41	22.3	25.9	2.5	49.4	71.7	-2.3
<=44	26.3	21.8	3.5	48.3	74.7	+16.7
<=47	30.5	17.7	5.2	46.6	77.1	+37.3
<=50	33.7	14.4	7.4	44.5	78.2	+55.4
<=53	37.5	10.7	10.2	41.6	79.1	+77.0
<=55	39.3	8.9	11.9	40.0	79.2	+75.3
<=58	41.6	6.5	15.6	36.2	77.8	+67.5
<=60	43.2	4.9	19.1	32.8	76.0	+60.4
<=62	44.4	3.8	22.5	29.4	73.7	+53.3
<=64	45.2	3.0	25.7	26.2	71.4	+46.7
<=66	46.3	1.9	30.5	21.4	67.7	+36.7
<=69	47.0	1.1	35.5	16.3	63.3	+26.2
<=72	47.4	0.8	39.6	12.2	59.6	+17.8
<=75	47.8	0.3	43.9	8.0	55.8	+8.9
<=80	48.1	0.1	48.3	3.5	51.6	-0.3
<=100	48.2	0.0	51.8	0.0	48.2	-7.7

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (\$3.20/day 2011 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	98.0	9.9	48.2:1
<=32	10.9	94.0	21.3	15.6:1
<=35	14.9	93.2	28.9	13.6:1
<=38	19.8	91.8	37.7	11.2:1
<=41	24.7	90.0	46.3	9.0:1
<=44	29.9	88.2	54.7	7.5:1
<=47	35.7	85.4	63.2	5.8:1
<=50	41.1	82.1	70.1	4.6:1
<=53	47.7	78.5	77.8	3.7:1
<=55	51.1	76.8	81.5	3.3:1
<=58	57.3	72.7	86.4	2.7:1
<=60	62.3	69.4	89.8	2.3:1
<=62	66.8	66.4	92.1	2.0:1
<=64	70.8	63.8	93.8	1.8:1
<=66	76.8	60.3	96.2	1.5:1
<=69	82.6	57.0	97.6	1.3:1
<=72	87.0	54.5	98.4	1.2:1
<=75	91.7	52.2	99.3	1.1:1
<=80	96.4	49.9	99.9	1.0:1
<=100	100.0	48.2	100.0	0.9:1

Scorecard applied to the validation sample.

**Tables for  
\$5.50/day 2011 PPP Poverty Line**



**Table 3 (\$5.50/day 2011 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	99.9
26–32	99.5
33–35	99.3
36–38	98.8
39–41	98.2
42–44	97.5
45–47	95.7
48–50	92.7
51–53	87.2
54–55	85.3
56–58	79.3
59–60	70.7
61–62	70.7
63–64	70.5
65–66	53.8
67–69	53.8
70–72	47.0
73–75	34.9
76–80	27.9
81–100	11.9

**Table 5 (\$5.50/day 2011 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+0.1	0.2	0.3	0.3
26-32	+0.2	0.4	0.4	0.6
33-35	0.0	0.5	0.6	0.8
36-38	-0.1	0.5	0.6	0.9
39-41	-0.9	0.6	0.7	0.7
42-44	-0.2	1.1	1.2	1.6
45-47	-1.6	1.2	1.2	1.4
48-50	-3.4	2.1	2.2	2.5
51-53	+4.7	3.6	4.3	5.7
54-55	-6.8	4.3	4.4	4.7
56-58	+7.9	3.6	4.2	5.5
59-60	+3.9	3.5	4.3	5.4
61-62	+12.1	4.2	5.0	6.5
63-64	+3.5	4.5	5.2	6.6
65-66	+8.1	3.7	4.5	5.8
67-69	+4.6	3.7	4.5	5.7
70-72	+24.3	3.2	3.7	5.1
73-75	+11.0	2.7	3.4	4.7
76-80	+16.7	1.7	2.1	2.6
81-100	+3.9	1.9	2.3	2.9

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (\$5.50/day 2011 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+1.3	61.9	72.2	87.9
4	+4.8	37.2	44.0	54.9
8	+4.8	29.5	35.0	46.7
16	+5.8	22.6	25.8	33.3
32	+5.9	16.3	18.6	24.0
64	+5.6	11.6	13.7	19.0
128	+5.5	8.0	9.3	12.2
256	+5.6	5.5	6.9	8.8
512	+5.7	4.1	4.7	6.0
1,024	+5.7	2.8	3.3	4.2
2,048	+5.7	2.1	2.5	3.2
4,096	+5.7	1.4	1.7	2.2
8,192	+5.8	1.0	1.2	1.6
16,384	+5.8	0.7	0.9	1.2

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$5.50/day 2011 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

<b>Targeting cut-off</b>	<b>Inclusion: Poor correctly targeted</b>	<b>Undercoverage: Poor mistakenly not targeted</b>	<b>Leakage: Non-poor mistakenly targeted</b>	<b>Exclusion: Non-poor correctly not targeted</b>	<b>Hit rate Inclusion + Exclusion</b>	<b>BPAC See text</b>
<=25	4.9	69.9	0.0	25.2	30.1	-87.0
<=32	10.8	63.9	0.1	25.2	36.0	-70.9
<=35	14.8	59.9	0.1	25.2	40.0	-60.2
<=38	19.6	55.1	0.2	25.1	44.7	-47.3
<=41	24.5	50.3	0.3	25.0	49.5	-34.2
<=44	29.5	45.2	0.4	24.9	54.4	-20.6
<=47	35.0	39.7	0.7	24.6	59.6	-5.4
<=50	40.1	34.6	1.0	24.3	64.4	+8.7
<=53	46.0	28.7	1.7	23.5	69.5	+25.4
<=55	49.0	25.7	2.1	23.2	72.2	+34.0
<=58	53.8	20.9	3.4	21.8	75.7	+48.7
<=60	57.5	17.3	4.8	20.4	77.9	+60.3
<=62	60.6	14.1	6.2	19.1	79.7	+70.6
<=64	63.3	11.4	7.5	17.8	81.1	+79.5
<=66	66.3	8.4	10.5	14.8	81.1	+86.0
<=69	69.5	5.2	13.1	12.2	81.7	+82.5
<=72	71.2	3.5	15.7	9.5	80.8	+78.9
<=75	73.0	1.7	18.7	6.6	79.6	+75.0
<=80	74.2	0.5	22.2	3.1	77.3	+70.4
<=100	74.7	0.0	25.3	0.0	74.7	+66.2

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (\$5.50/day 2011 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	99.6	6.5	275.7:1
<=32	10.9	99.3	14.5	150.0:1
<=35	14.9	99.3	19.8	139.3:1
<=38	19.8	99.0	26.2	103.4:1
<=41	24.7	98.9	32.7	89.1:1
<=44	29.9	98.7	39.5	78.8:1
<=47	35.7	98.1	46.8	52.9:1
<=50	41.1	97.6	53.7	40.2:1
<=53	47.7	96.4	61.6	26.7:1
<=55	51.1	95.9	65.6	23.4:1
<=58	57.3	94.0	72.1	15.8:1
<=60	62.3	92.3	76.9	11.9:1
<=62	66.8	90.7	81.1	9.8:1
<=64	70.8	89.4	84.7	8.4:1
<=66	76.8	86.3	88.7	6.3:1
<=69	82.6	84.2	93.0	5.3:1
<=72	87.0	81.9	95.3	4.5:1
<=75	91.7	79.6	97.7	3.9:1
<=80	96.4	77.0	99.3	3.4:1
<=100	100.0	74.7	100.0	3.0:1

Scorecard applied to the validation sample.

**Tables for  
\$21.70/day 2011 PPP Poverty Line**

**Table 3 (\$21.70/day 2011 PPP line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	100.0
26–32	100.0
33–35	100.0
36–38	100.0
39–41	100.0
42–44	100.0
45–47	100.0
48–50	99.9
51–53	99.9
54–55	99.9
56–58	99.9
59–60	99.6
61–62	99.6
63–64	99.6
65–66	99.6
67–69	99.2
70–72	99.0
73–75	98.2
76–80	96.3
81–100	86.3

**Table 5 (\$21.70/day 2011 PPP line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	0.0	0.0	0.0	0.0
26–32	0.0	0.0	0.0	0.0
33–35	0.0	0.0	0.0	0.0
36–38	0.0	0.0	0.0	0.0
39–41	0.0	0.0	0.0	0.0
42–44	+0.1	0.1	0.1	0.2
45–47	0.0	0.0	0.0	0.0
48–50	-0.1	0.0	0.0	0.0
51–53	-0.1	0.1	0.1	0.1
54–55	-0.1	0.1	0.1	0.1
56–58	-0.1	0.1	0.1	0.1
59–60	+3.1	1.4	1.7	2.3
61–62	-0.4	0.2	0.2	0.2
63–64	+0.5	0.6	0.7	0.8
65–66	+3.2	1.3	1.5	1.9
67–69	0.0	0.4	0.5	0.6
70–72	-1.0	0.5	0.5	0.5
73–75	-1.4	0.8	0.8	0.9
76–80	-0.5	1.4	1.6	2.2
81–100	-2.8	2.7	3.3	4.4

Scorecard applied to 1,000 bootstraps from the validation sample.



**Table 6 (\$21.70/day 2011 PPP line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	0.0	1.8	6.9	55.5
4	+0.4	2.5	15.7	36.2
8	+0.5	9.1	15.3	24.3
16	+0.3	7.9	10.7	15.1
32	+0.2	5.4	6.4	9.7
64	+0.2	3.5	4.2	6.0
128	+0.1	2.5	3.1	4.3
256	+0.1	1.8	2.1	3.1
512	+0.1	1.2	1.5	2.1
1,024	+0.1	0.9	1.0	1.3
2,048	+0.1	0.6	0.8	1.0
4,096	+0.1	0.5	0.5	0.7
8,192	+0.1	0.3	0.4	0.5
16,384	+0.1	0.2	0.3	0.3

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (\$21.70/day 2011 PPP line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

<b>Targeting cut-off</b>	<b>Inclusion: Poor correctly targeted</b>	<b>Undercoverage: Poor mistakenly not targeted</b>	<b>Leakage: Non-poor mistakenly targeted</b>	<b>Exclusion: Non-poor correctly not targeted</b>	<b>Hit rate Inclusion + Exclusion</b>	<b>BPAC See text</b>
<=25	4.9	94.3	0.0	0.8	5.7	-90.2
<=32	10.9	88.2	0.0	0.8	11.8	-78.0
<=35	14.9	84.2	0.0	0.8	15.8	-69.9
<=38	19.8	79.4	0.0	0.8	20.6	-60.1
<=41	24.7	74.4	0.0	0.8	25.6	-50.1
<=44	29.9	69.3	0.0	0.8	30.7	-39.8
<=47	35.6	63.5	0.0	0.8	36.5	-28.1
<=50	41.1	58.1	0.0	0.8	41.9	-17.1
<=53	47.7	51.5	0.0	0.8	48.5	-3.8
<=55	51.1	48.0	0.0	0.8	51.9	+3.1
<=58	57.2	41.9	0.0	0.8	58.1	+15.5
<=60	62.2	37.0	0.1	0.7	62.9	+25.6
<=62	66.7	32.4	0.1	0.7	67.5	+34.7
<=64	70.7	28.5	0.2	0.7	71.4	+42.7
<=66	76.5	22.6	0.3	0.6	77.1	+54.6
<=69	82.2	16.9	0.3	0.5	82.7	+66.2
<=72	86.6	12.5	0.4	0.5	87.1	+75.1
<=75	91.3	7.8	0.4	0.5	91.8	+84.6
<=80	95.9	3.3	0.5	0.3	96.2	+93.9
<=100	99.2	0.0	0.8	0.0	99.2	+99.1

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (\$21.70/day 2011 PPP line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	100.0	4.9	Only poor targeted
<=32	10.9	100.0	11.0	Only poor targeted
<=35	14.9	100.0	15.0	Only poor targeted
<=38	19.8	100.0	20.0	Only poor targeted
<=41	24.7	100.0	25.0	Only poor targeted
<=44	29.9	100.0	30.1	2,331.2:1
<=47	35.7	100.0	36.0	2,096.9:1
<=50	41.1	100.0	41.4	2,416.9:1
<=53	47.7	100.0	48.1	2,220.3:1
<=55	51.1	100.0	51.5	2,378.8:1
<=58	57.3	100.0	57.7	2,664.4:1
<=60	62.3	99.8	62.7	565.0:1
<=62	66.8	99.8	67.3	606.3:1
<=64	70.8	99.8	71.3	452.0:1
<=66	76.8	99.6	77.2	277.7:1
<=69	82.6	99.6	82.9	240.3:1
<=72	87.0	99.6	87.4	244.9:1
<=75	91.7	99.6	92.1	236.8:1
<=80	96.4	99.5	96.7	192.0:1
<=100	100.0	99.2	100.0	117.3:1

Scorecard applied to the validation sample.

**Tables for  
the Line Marking the Poorest Half of People  
Below 100% of the National Poverty Line**

**Table 3 (Line marking the poorest half of people below 100% of the national line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	59.0
26–32	38.7
33–35	31.3
36–38	25.1
39–41	20.7
42–44	17.7
45–47	13.7
48–50	8.7
51–53	5.5
54–55	4.5
56–58	4.5
59–60	1.7
61–62	1.6
63–64	0.7
65–66	0.7
67–69	0.4
70–72	0.3
73–75	0.0
76–80	0.0
81–100	0.0

**Table 5 (Line marking the poorest half of people below 100% of the national line): Errors in a household’s poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	+4.6	3.9	4.6	5.8
26–32	+7.4	3.0	3.6	4.7
33–35	+2.3	3.6	4.3	5.5
36–38	+8.7	2.6	3.0	4.0
39–41	+6.6	2.2	2.6	3.4
42–44	–0.4	2.5	3.0	4.0
45–47	–1.2	2.3	2.7	3.9
48–50	+0.2	1.9	2.2	3.1
51–53	0.0	1.3	1.6	1.9
54–55	–1.9	2.5	2.8	3.6
56–58	–0.8	1.4	1.7	2.1
59–60	+0.8	0.4	0.5	0.6
61–62	+0.9	0.3	0.4	0.5
63–64	–0.8	0.7	0.8	1.0
65–66	+0.6	0.1	0.1	0.1
67–69	+0.2	0.1	0.2	0.2
70–72	+0.1	0.1	0.1	0.2
73–75	0.0	0.0	0.0	0.0
76–80	0.0	0.0	0.0	0.0
81–100	0.0	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (Line marking the poorest half of people below 100% of the national line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-2.1	60.5	65.0	77.3
4	-0.2	24.8	32.3	46.1
8	-0.1	15.4	18.9	27.0
16	+0.4	11.2	13.1	19.4
32	+0.6	7.7	9.1	13.5
64	+0.7	5.3	6.4	8.9
128	+0.8	3.9	4.6	5.8
256	+0.9	2.6	3.2	4.5
512	+1.0	1.8	2.2	2.9
1,024	+1.0	1.2	1.5	1.8
2,048	+1.1	0.9	1.1	1.4
4,096	+1.1	0.7	0.8	1.0
8,192	+1.1	0.5	0.6	0.7
16,384	+1.1	0.3	0.4	0.5

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (Line marking the poorest half of people below 100% of the national line):  
Percentages of households by cut-off score and targeting classification, along with  
the hit rate and BPAC**

Targeting cut-off	<u>Inclusion:</u> Poor correctly targeted	<u>Undercoverage:</u> Poor mistakenly not targeted	<u>Leakage:</u> Non-poor mistakenly targeted	<u>Exclusion:</u> Non-poor correctly not targeted	<u>Hit rate</u> Inclusion + Exclusion	<u>BPAC</u> See text
<=25	2.7	9.5	2.1	85.6	88.3	-37.8
<=32	4.9	7.3	6.0	81.7	86.6	+29.1
<=35	6.1	6.1	8.8	78.9	85.0	+27.9
<=38	7.3	4.9	12.5	75.3	82.6	-1.9
<=41	8.4	3.9	16.4	71.4	79.7	-33.9
<=44	9.3	2.9	20.5	67.2	76.6	-67.9
<=47	10.2	2.0	25.4	62.3	72.5	-108.0
<=50	10.8	1.5	30.4	57.4	68.2	-148.1
<=53	11.3	0.9	36.4	51.4	62.7	-197.5
<=55	11.5	0.7	39.6	48.1	59.6	-223.8
<=58	11.9	0.3	45.4	42.4	54.3	-270.9
<=60	12.0	0.3	50.3	37.4	49.4	-311.3
<=62	12.1	0.2	54.8	33.0	45.0	-347.7
<=64	12.2	0.1	58.7	29.1	41.3	-379.5
<=66	12.2	0.0	64.6	23.2	35.4	-428.0
<=69	12.2	0.0	70.3	17.4	29.6	-474.9
<=72	12.2	0.0	74.8	13.0	25.2	-511.0
<=75	12.2	0.0	79.5	8.3	20.5	-549.7
<=80	12.2	0.0	84.2	3.6	15.8	-587.9
<=100	12.2	0.0	87.8	0.0	12.2	-617.3

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.



**Table 10 (Line marking the poorest half of people below 100% of the national line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

<b>Targeting cut-off</b>	<b>% all HHs who are targeted</b>	<b>% targeted HHs who are poor</b>	<b>% poor HHs who are targeted</b>	<b>Poor HHs targeted per non-poor HH targeted</b>
<=25	4.9	56.0	22.3	1.3:1
<=32	10.9	44.8	40.0	0.8:1
<=35	14.9	40.9	49.8	0.7:1
<=38	19.8	37.0	59.8	0.6:1
<=41	24.7	33.8	68.3	0.5:1
<=44	29.9	31.2	76.2	0.5:1
<=47	35.7	28.6	83.5	0.4:1
<=50	41.1	26.2	87.9	0.4:1
<=53	47.7	23.7	92.5	0.3:1
<=55	51.1	22.5	94.0	0.3:1
<=58	57.3	20.8	97.1	0.3:1
<=60	62.3	19.2	97.9	0.2:1
<=62	66.8	18.0	98.5	0.2:1
<=64	70.8	17.2	99.4	0.2:1
<=66	76.8	15.9	99.6	0.2:1
<=69	82.6	14.8	99.8	0.2:1
<=72	87.0	14.1	100.0	0.2:1
<=75	91.7	13.3	100.0	0.2:1
<=80	96.4	12.7	100.0	0.1:1
<=100	100.0	12.2	100.0	0.1:1

Scorecard applied to the validation sample.

**Tables for  
the First-Decile (10<sup>th</sup>-Percentile) Poverty Line**

**Table 3 (First-decile (10<sup>th</sup>-percentile) line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	42.0
26–32	20.7
33–35	15.2
36–38	12.8
39–41	10.3
42–44	7.8
45–47	6.5
48–50	4.0
51–53	2.3
54–55	1.1
56–58	1.1
59–60	0.8
61–62	0.7
63–64	0.3
65–66	0.3
67–69	0.2
70–72	0.1
73–75	0.0
76–80	0.0
81–100	0.0

**Table 5 (First-decile (10<sup>th</sup>-percentile) line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+3.2	3.8	4.4	5.8
26-32	+1.8	2.4	2.9	3.9
33-35	+2.2	2.4	2.8	3.7
36-38	+6.0	1.5	1.7	2.3
39-41	+0.7	1.9	2.3	2.9
42-44	-1.0	1.9	2.3	2.9
45-47	-1.9	1.9	2.1	2.8
48-50	-0.2	1.5	1.9	2.4
51-53	+1.2	0.3	0.4	0.5
54-55	-3.6	3.0	3.3	3.6
56-58	-1.4	1.3	1.4	1.6
59-60	+0.5	0.2	0.3	0.4
61-62	+0.4	0.2	0.3	0.3
63-64	-0.8	0.7	0.8	0.9
65-66	+0.2	0.1	0.1	0.1
67-69	+0.2	0.0	0.0	0.0
70-72	+0.1	0.0	0.0	0.0
73-75	0.0	0.0	0.0	0.0
76-80	0.0	0.0	0.0	0.0
81-100	0.0	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (First-decile (10<sup>th</sup>-percentile) line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-0.9	50.0	65.8	70.2
4	-0.3	18.4	24.4	37.8
8	-0.4	11.6	14.5	24.2
16	-0.1	8.0	10.4	14.8
32	0.0	5.9	7.2	10.4
64	+0.2	3.9	4.9	7.0
128	+0.2	2.8	3.3	4.8
256	+0.2	2.1	2.5	3.2
512	+0.3	1.4	1.7	2.1
1,024	+0.3	1.0	1.1	1.4
2,048	+0.3	0.7	0.8	1.1
4,096	+0.3	0.5	0.5	0.8
8,192	+0.3	0.3	0.4	0.5
16,384	+0.3	0.2	0.3	0.4

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (First-decile (10<sup>th</sup>-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	1.9	4.8	3.0	90.3	92.2	+1.4
<=32	3.2	3.5	7.8	85.6	88.7	-16.3
<=35	3.8	2.9	11.1	82.2	86.0	-67.0
<=38	4.3	2.4	15.5	77.8	82.1	-132.2
<=41	4.9	1.7	19.8	73.5	78.5	-197.1
<=44	5.4	1.3	24.5	68.8	74.2	-267.4
<=47	5.8	0.8	29.8	63.5	69.3	-347.6
<=50	6.0	0.6	35.1	58.3	64.3	-425.8
<=53	6.2	0.4	41.5	51.8	58.1	-522.2
<=55	6.3	0.3	44.8	48.5	54.9	-571.9
<=58	6.5	0.2	50.8	42.6	49.1	-661.2
<=60	6.5	0.1	55.8	37.6	44.1	-736.3
<=62	6.6	0.1	60.3	33.1	39.6	-803.8
<=64	6.6	0.0	64.2	29.1	35.8	-862.6
<=66	6.7	0.0	70.1	23.2	29.9	-951.7
<=69	6.7	0.0	75.9	17.4	24.1	-1,038.1
<=72	6.7	0.0	80.3	13.0	19.7	-1,104.6
<=75	6.7	0.0	85.1	8.3	14.9	-1,175.7
<=80	6.7	0.0	89.7	3.6	10.3	-1,245.7
<=100	6.7	0.0	93.3	0.0	6.7	-1,299.7

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (First-decile (10<sup>th</sup>-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	38.7	28.3	0.6:1
<=32	10.9	29.0	47.4	0.4:1
<=35	14.9	25.4	56.7	0.3:1
<=38	19.8	21.7	64.4	0.3:1
<=41	24.7	19.9	74.0	0.2:1
<=44	29.9	18.0	80.5	0.2:1
<=47	35.7	16.3	87.3	0.2:1
<=50	41.1	14.7	90.7	0.2:1
<=53	47.7	13.1	93.5	0.2:1
<=55	51.1	12.4	94.9	0.1:1
<=58	57.3	11.4	97.6	0.1:1
<=60	62.3	10.5	98.0	0.1:1
<=62	66.8	9.8	98.6	0.1:1
<=64	70.8	9.4	99.7	0.1:1
<=66	76.8	8.7	99.9	0.1:1
<=69	82.6	8.1	99.9	0.1:1
<=72	87.0	7.7	99.9	0.1:1
<=75	91.7	7.3	99.9	0.1:1
<=80	96.4	6.9	99.9	0.1:1
<=100	100.0	6.7	100.0	0.1:1

Scorecard applied to the validation sample.

**Tables for  
the First-Quintile (20<sup>th</sup>-Percentile) Poverty Line**



**Table 3 (First-quintile (20<sup>th</sup>-percentile) line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	62.7
26–32	41.7
33–35	36.5
36–38	29.1
39–41	23.6
42–44	20.7
45–47	15.1
48–50	11.3
51–53	7.0
54–55	5.2
56–58	5.2
59–60	2.5
61–62	2.2
63–64	1.0
65–66	0.9
67–69	0.4
70–72	0.3
73–75	0.0
76–80	0.0
81–100	0.0

**Table 5 (First-quintile (20<sup>th</sup>-percentile) line): Errors in a household’s poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	+1.8	3.8	4.6	6.0
26–32	+8.1	3.1	3.6	4.7
33–35	+3.8	3.8	4.4	5.8
36–38	+11.4	2.6	3.1	4.1
39–41	+8.0	2.4	2.8	3.6
42–44	+1.2	2.6	3.1	4.3
45–47	–0.7	2.3	2.6	3.8
48–50	+2.5	1.9	2.2	3.0
51–53	+0.8	1.4	1.6	2.0
54–55	–2.5	2.6	3.0	3.9
56–58	–0.4	1.4	1.7	2.2
59–60	+1.5	0.4	0.5	0.7
61–62	+1.5	0.3	0.4	0.5
63–64	–0.4	0.6	0.7	1.0
65–66	+0.8	0.1	0.1	0.1
67–69	+0.1	0.2	0.2	0.3
70–72	+0.2	0.1	0.1	0.2
73–75	0.0	0.0	0.0	0.0
76–80	0.0	0.0	0.0	0.0
81–100	0.0	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (First-quintile (20<sup>th</sup>-percentile) line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-1.7	60.5	65.2	79.4
4	0.0	25.6	32.7	45.2
8	+0.2	16.1	19.4	30.5
16	+0.8	11.4	14.2	20.7
32	+1.1	8.0	9.9	13.6
64	+1.2	5.5	6.7	9.3
128	+1.3	4.0	4.7	6.1
256	+1.4	2.8	3.3	4.6
512	+1.5	1.9	2.3	3.0
1,024	+1.6	1.3	1.5	1.9
2,048	+1.6	0.9	1.1	1.4
4,096	+1.6	0.7	0.8	1.1
8,192	+1.6	0.5	0.6	0.7
16,384	+1.6	0.4	0.4	0.5

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (First-quintile (20<sup>th</sup>-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	2.9	10.5	2.0	84.6	87.5	-41.9
<=32	5.3	8.2	5.7	80.9	86.2	+20.4
<=35	6.6	6.8	8.3	78.3	84.9	+38.3
<=38	8.0	5.5	11.8	74.8	82.7	+12.0
<=41	9.1	4.3	15.6	70.9	80.0	-16.5
<=44	10.2	3.3	19.7	66.9	77.0	-46.8
<=47	11.2	2.3	24.5	62.1	73.2	-82.5
<=50	11.7	1.7	29.4	57.2	68.9	-118.7
<=53	12.4	1.0	35.3	51.2	63.6	-163.1
<=55	12.6	0.8	38.5	48.1	60.7	-186.7
<=58	13.0	0.4	44.2	42.4	55.4	-229.2
<=60	13.2	0.3	49.1	37.4	50.6	-265.9
<=62	13.2	0.2	53.6	33.0	46.2	-299.1
<=64	13.3	0.1	57.5	29.1	42.4	-328.0
<=66	13.4	0.1	63.4	23.1	36.5	-372.2
<=69	13.4	0.0	69.1	17.4	30.8	-414.8
<=72	13.4	0.0	73.6	13.0	26.4	-447.7
<=75	13.4	0.0	78.3	8.3	21.7	-483.0
<=80	13.4	0.0	83.0	3.6	17.0	-517.8
<=100	13.4	0.0	86.6	0.0	13.4	-544.6

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (First-quintile (20<sup>th</sup>-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	60.0	21.8	1.5:1
<=32	10.9	48.2	39.1	0.9:1
<=35	14.9	44.4	49.3	0.8:1
<=38	19.8	40.3	59.3	0.7:1
<=41	24.7	36.8	67.7	0.6:1
<=44	29.9	34.0	75.6	0.5:1
<=47	35.7	31.3	83.1	0.5:1
<=50	41.1	28.5	87.4	0.4:1
<=53	47.7	26.0	92.2	0.4:1
<=55	51.1	24.7	93.9	0.3:1
<=58	57.3	22.8	97.1	0.3:1
<=60	62.3	21.1	98.0	0.3:1
<=62	66.8	19.8	98.5	0.2:1
<=64	70.8	18.8	99.4	0.2:1
<=66	76.8	17.4	99.5	0.2:1
<=69	82.6	16.2	99.9	0.2:1
<=72	87.0	15.4	100.0	0.2:1
<=75	91.7	14.6	100.0	0.2:1
<=80	96.4	13.9	100.0	0.2:1
<=100	100.0	13.4	100.0	0.2:1

Scorecard applied to the validation sample.

**Tables for  
the Second-Quintile (40<sup>th</sup>-Percentile) Poverty Line**

**Table 3 (Second-quintile (40<sup>th</sup>-percentile) line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	83.7
26–32	75.7
33–35	67.2
36–38	61.3
39–41	57.3
42–44	50.4
45–47	36.7
48–50	31.8
51–53	24.1
54–55	18.8
56–58	18.1
59–60	10.6
61–62	9.2
63–64	5.8
65–66	4.8
67–69	3.2
70–72	3.2
73–75	1.2
76–80	0.5
81–100	0.2

**Table 5 (Second-quintile (40<sup>th</sup>-percentile) line): Errors in a household’s poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	–1.1	3.2	3.8	5.1
26–32	+17.3	3.7	4.4	5.9
33–35	+3.1	3.9	4.7	6.1
36–38	+17.0	4.3	5.3	7.6
39–41	+15.9	4.6	5.4	8.0
42–44	+4.7	3.4	3.9	5.5
45–47	–6.8	5.2	5.6	6.1
48–50	+8.3	2.7	3.2	4.0
51–53	+4.4	2.5	3.0	3.8
54–55	–8.8	6.5	7.0	7.8
56–58	+4.6	2.0	2.4	3.0
59–60	+4.7	1.3	1.6	2.0
61–62	+5.9	0.8	0.9	1.1
63–64	+1.3	1.1	1.2	1.6
65–66	+2.3	0.8	1.0	1.2
67–69	+1.6	0.4	0.5	0.7
70–72	+2.4	0.4	0.5	0.7
73–75	+0.8	0.3	0.3	0.4
76–80	+0.2	0.2	0.2	0.3
81–100	+0.1	0.0	0.0	0.0

Scorecard applied to 1,000 bootstraps from the validation sample.



**Table 6 (Second-quintile (40<sup>th</sup>-percentile) line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-0.9	68.6	78.8	90.2
4	+1.1	34.6	45.1	59.6
8	+1.8	23.5	29.8	41.0
16	+2.7	17.6	20.7	27.8
32	+3.2	12.3	15.1	19.8
64	+3.5	8.7	10.3	13.6
128	+3.7	6.3	7.5	9.8
256	+3.7	4.4	5.1	6.9
512	+3.8	2.9	3.4	4.4
1,024	+3.9	2.1	2.5	3.1
2,048	+3.8	1.5	1.8	2.4
4,096	+3.8	1.1	1.3	1.8
8,192	+3.8	0.8	0.9	1.1
16,384	+3.8	0.5	0.6	0.8

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (Second-quintile (40<sup>th</sup>-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.2	24.3	0.7	70.8	75.0	-68.2
<=32	8.3	20.2	2.6	68.8	77.1	-32.7
<=35	10.8	17.7	4.1	67.4	78.2	-9.6
<=38	13.8	14.7	6.0	65.5	79.3	+17.9
<=41	16.3	12.2	8.4	63.1	79.4	+44.0
<=44	18.7	9.8	11.2	60.3	79.0	+60.8
<=47	21.1	7.4	14.6	56.9	78.1	+48.9
<=50	22.8	5.7	18.3	53.1	75.9	+35.6
<=53	24.6	4.0	23.2	48.3	72.9	+18.7
<=55	25.4	3.1	25.7	45.7	71.1	+9.7
<=58	26.6	1.9	30.6	40.8	67.5	-7.5
<=60	27.1	1.4	35.2	36.3	63.4	-23.4
<=62	27.5	1.0	39.3	32.2	59.7	-38.0
<=64	27.9	0.6	43.0	28.5	56.4	-50.7
<=66	28.1	0.4	48.7	22.8	50.9	-70.8
<=69	28.3	0.2	54.2	17.3	45.6	-90.2
<=72	28.4	0.1	58.6	12.9	41.3	-105.5
<=75	28.5	0.0	63.3	8.2	36.7	-121.9
<=80	28.5	0.0	67.9	3.6	32.1	-138.2
<=100	28.5	0.0	71.5	0.0	28.5	-150.8

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (Second-quintile (40<sup>th</sup>-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	85.6	14.6	5.9:1
<=32	10.9	75.8	29.0	3.1:1
<=35	14.9	72.6	38.0	2.7:1
<=38	19.8	69.8	48.5	2.3:1
<=41	24.7	65.9	57.2	1.9:1
<=44	29.9	62.6	65.6	1.7:1
<=47	35.7	59.2	74.1	1.5:1
<=50	41.1	55.4	79.9	1.2:1
<=53	47.7	51.4	86.1	1.1:1
<=55	51.1	49.7	89.1	1.0:1
<=58	57.3	46.5	93.4	0.9:1
<=60	62.3	43.5	95.2	0.8:1
<=62	66.9	41.2	96.5	0.7:1
<=64	70.9	39.4	97.8	0.6:1
<=66	76.8	36.6	98.6	0.6:1
<=69	82.6	34.3	99.4	0.5:1
<=72	87.0	32.7	99.7	0.5:1
<=75	91.7	31.0	99.8	0.4:1
<=80	96.4	29.6	100.0	0.4:1
<=100	100.0	28.5	100.0	0.4:1

Scorecard applied to the validation sample.

**Tables for  
the Median (50<sup>th</sup>-Percentile) Poverty Line**

**Table 3 (Median (50<sup>th</sup>-percentile) line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	91.1
26–32	85.1
33–35	79.0
36–38	74.5
39–41	70.2
42–44	65.0
45–47	52.6
48–50	46.5
51–53	37.3
54–55	29.9
56–58	27.7
59–60	18.4
61–62	13.9
63–64	10.6
65–66	7.9
67–69	7.5
70–72	5.8
73–75	2.9
76–80	1.2
81–100	1.0

**Table 5 (Median (50<sup>th</sup>-percentile) line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	-3.8	2.5	2.6	2.9
26-32	+18.4	3.8	4.7	6.1
33-35	+3.3	3.7	4.7	6.1
36-38	-2.3	3.5	4.1	5.1
39-41	-3.5	3.8	4.6	5.6
42-44	+2.6	3.3	3.9	5.0
45-47	-0.4	3.7	4.6	5.7
48-50	+5.3	3.5	4.2	5.5
51-53	+5.4	3.3	3.9	5.1
54-55	-7.6	5.9	6.3	7.0
56-58	+9.5	2.3	2.7	3.5
59-60	+5.4	2.3	2.6	3.3
61-62	+7.1	1.3	1.6	2.0
63-64	+3.1	1.4	1.6	2.3
65-66	+4.6	0.9	1.0	1.3
67-69	+2.9	1.1	1.3	1.6
70-72	+4.4	0.6	0.7	0.9
73-75	+1.3	0.5	0.6	0.9
76-80	+0.8	0.2	0.2	0.3
81-100	+0.7	0.2	0.2	0.3

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (Median (50<sup>th</sup>-percentile) line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	-0.1	68.9	81.4	92.6
4	+1.0	34.8	42.5	56.2
8	+2.2	24.1	29.9	38.3
16	+2.7	16.9	21.6	27.8
32	+2.9	12.2	14.4	19.3
64	+3.0	8.4	9.8	13.5
128	+3.2	6.1	7.1	10.3
256	+3.2	4.0	4.8	6.5
512	+3.2	2.9	3.4	4.5
1,024	+3.3	2.2	2.5	3.3
2,048	+3.3	1.6	1.9	2.3
4,096	+3.3	1.1	1.3	1.9
8,192	+3.3	0.8	0.9	1.3
16,384	+3.3	0.6	0.7	0.9

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (Median (50<sup>th</sup>-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.5	32.8	0.4	62.3	66.8	-74.9
<=32	9.2	28.1	1.7	61.0	70.2	-46.1
<=35	12.4	25.0	2.5	60.1	72.5	-26.9
<=38	16.0	21.4	3.8	58.8	74.8	-4.3
<=41	19.3	18.0	5.4	57.2	76.6	+18.0
<=44	22.5	14.8	7.3	55.3	77.8	+40.3
<=47	25.6	11.7	10.0	52.6	78.2	+64.1
<=50	28.2	9.2	12.9	49.7	77.9	+65.3
<=53	30.9	6.5	16.8	45.8	76.7	+54.9
<=55	32.1	5.2	19.0	43.6	75.7	+49.0
<=58	33.8	3.5	23.4	39.2	73.1	+37.3
<=60	34.7	2.6	27.6	35.1	69.8	+26.1
<=62	35.4	1.9	31.4	31.3	66.7	+15.9
<=64	36.1	1.2	34.7	27.9	64.0	+7.0
<=66	36.4	0.9	40.3	22.3	58.8	-8.0
<=69	36.9	0.4	45.6	17.0	54.0	-22.2
<=72	37.1	0.3	49.9	12.7	49.8	-33.7
<=75	37.2	0.1	54.5	8.2	45.4	-45.9
<=80	37.3	0.0	59.1	3.6	40.9	-58.3
<=100	37.3	0.0	62.7	0.0	37.3	-67.8

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.



**Table 10 (Median (50<sup>th</sup>-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

<b>Targeting cut-off</b>	<b>% all HHs who are targeted</b>	<b>% targeted HHs who are poor</b>	<b>% poor HHs who are targeted</b>	<b>Poor HHs targeted per non-poor HH targeted</b>
<=25	4.9	92.4	12.1	12.2:1
<=32	10.9	84.6	24.7	5.5:1
<=35	14.9	83.0	33.1	4.9:1
<=38	19.8	80.7	42.7	4.2:1
<=41	24.7	78.1	51.8	3.6:1
<=44	29.9	75.4	60.3	3.1:1
<=47	35.7	71.8	68.6	2.6:1
<=50	41.1	68.5	75.4	2.2:1
<=53	47.7	64.7	82.7	1.8:1
<=55	51.1	62.8	86.0	1.7:1
<=58	57.3	59.1	90.6	1.4:1
<=60	62.3	55.7	93.0	1.3:1
<=62	66.8	53.0	94.9	1.1:1
<=64	70.8	51.0	96.7	1.0:1
<=66	76.8	47.5	97.6	0.9:1
<=69	82.6	44.7	98.9	0.8:1
<=72	87.0	42.6	99.3	0.7:1
<=75	91.7	40.6	99.7	0.7:1
<=80	96.4	38.7	99.9	0.6:1
<=100	100.0	37.3	100.0	0.6:1

Scorecard applied to the validation sample.

**Tables for  
the Third-Quintile (60<sup>th</sup>-Percentile) Poverty Line**

**Table 3 (Third-quintile (60<sup>th</sup>-percentile) line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	95.2
26–32	92.2
33–35	88.2
36–38	87.1
39–41	84.0
42–44	77.4
45–47	69.1
48–50	61.7
51–53	52.2
54–55	45.2
56–58	37.5
59–60	27.6
61–62	24.2
63–64	20.6
65–66	15.1
67–69	13.6
70–72	9.8
73–75	6.9
76–80	4.2
81–100	1.8

**Table 5 (Third-quintile (60<sup>th</sup>-percentile) line): Errors in a household’s poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0–25	–2.3	1.6	1.6	1.8
26–32	+16.1	3.9	4.5	5.8
33–35	+6.4	3.6	4.5	5.7
36–38	+0.1	2.8	3.5	4.5
39–41	–5.0	3.5	3.7	3.9
42–44	+1.5	3.0	3.5	4.6
45–47	+3.8	3.6	4.4	5.8
48–50	+8.4	3.8	4.6	6.1
51–53	+11.5	3.6	4.3	5.5
54–55	–1.3	4.6	5.4	7.0
56–58	+12.9	2.6	3.1	4.2
59–60	+9.5	2.5	2.9	3.6
61–62	+9.9	2.3	2.7	3.4
63–64	+10.4	1.7	2.0	2.8
65–66	+6.5	1.6	1.9	2.5
67–69	+5.5	1.4	1.7	2.3
70–72	+6.6	0.8	1.0	1.3
73–75	+4.5	0.6	0.7	0.9
76–80	+2.9	0.5	0.5	0.7
81–100	+1.4	0.2	0.3	0.3

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (Third-quintile (60<sup>th</sup>-percentile) line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+0.1	70.8	84.4	92.7
4	+2.4	35.7	43.2	58.2
8	+3.7	25.5	30.9	39.3
16	+5.1	17.8	21.7	28.6
32	+5.6	13.0	15.6	20.4
64	+5.7	9.0	10.6	14.3
128	+5.9	6.7	8.0	10.7
256	+6.0	4.5	5.5	6.8
512	+6.0	3.1	3.6	4.8
1,024	+6.0	2.3	2.8	3.4
2,048	+6.0	1.6	1.9	2.5
4,096	+6.0	1.1	1.4	1.8
8,192	+6.0	0.8	1.0	1.3
16,384	+6.0	0.6	0.7	1.0

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (Third-quintile (60<sup>th</sup>-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.7	41.6	0.2	53.5	58.2	-79.3
<=32	9.9	36.4	1.0	52.7	62.6	-55.0
<=35	13.3	32.9	1.6	52.1	65.5	-38.9
<=38	17.5	28.7	2.2	51.5	69.0	-19.4
<=41	21.6	24.6	3.1	50.6	72.3	+0.2
<=44	25.6	20.7	4.3	49.4	75.0	+19.8
<=47	29.5	16.8	6.2	47.5	77.0	+40.7
<=50	32.8	13.5	8.3	45.4	78.2	+59.6
<=53	36.5	9.8	11.3	42.5	78.9	+75.7
<=55	38.1	8.2	13.0	40.7	78.8	+71.9
<=58	40.5	5.8	16.8	36.9	77.4	+63.7
<=60	41.8	4.5	20.5	33.2	75.1	+55.8
<=62	43.0	3.3	23.8	29.9	72.9	+48.5
<=64	43.9	2.4	26.9	26.8	70.7	+41.8
<=66	44.6	1.6	32.1	21.6	66.2	+30.5
<=69	45.4	0.9	37.1	16.6	62.0	+19.8
<=72	45.8	0.5	41.2	12.5	58.3	+11.0
<=75	46.1	0.2	45.7	8.0	54.1	+1.4
<=80	46.2	0.1	50.2	3.6	49.8	-8.4
<=100	46.3	0.0	53.7	0.0	46.3	-16.0

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (Third-quintile (60<sup>th</sup>-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	96.4	10.2	26.8:1
<=32	10.9	90.7	21.4	9.8:1
<=35	14.9	89.5	28.8	8.5:1
<=38	19.8	88.7	37.9	7.8:1
<=41	24.7	87.5	46.8	7.0:1
<=44	29.9	85.6	55.3	6.0:1
<=47	35.7	82.6	63.7	4.8:1
<=50	41.1	79.8	70.8	3.9:1
<=53	47.7	76.4	78.8	3.2:1
<=55	51.1	74.5	82.3	2.9:1
<=58	57.3	70.7	87.5	2.4:1
<=60	62.3	67.1	90.4	2.0:1
<=62	66.8	64.4	92.9	1.8:1
<=64	70.8	62.0	94.8	1.6:1
<=66	76.8	58.1	96.4	1.4:1
<=69	82.6	55.0	98.1	1.2:1
<=72	87.0	52.6	98.9	1.1:1
<=75	91.7	50.2	99.5	1.0:1
<=80	96.4	48.0	99.9	0.9:1
<=100	100.0	46.3	100.0	0.9:1

Scorecard applied to the validation sample.

**Tables for  
the Fourth-Quintile (80<sup>th</sup>-Percentile) Poverty Line**



**Table 3 (Fourth-quintile (80<sup>th</sup>-percentile) line): Scores and their corresponding estimates of poverty likelihoods**

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–25	99.8
26–32	99.3
33–35	98.8
36–38	97.8
39–41	97.1
42–44	95.6
45–47	90.4
48–50	86.0
51–53	81.9
54–55	79.1
56–58	70.5
59–60	62.7
61–62	59.5
63–64	57.1
65–66	39.1
67–69	39.1
70–72	33.8
73–75	23.0
76–80	18.6
81–100	9.0

**Table 5 (Fourth-quintile (80<sup>th</sup>-percentile) line): Errors in a household's poverty likelihood (average of differences between estimated and observed values) by score range, with confidence intervals**

Score	Error	Difference between estimate and observed value		
		Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
0-25	+0.1	0.3	0.3	0.4
26-32	+2.7	1.2	1.5	2.0
33-35	-0.3	0.6	0.7	0.9
36-38	-0.9	0.7	0.7	0.8
39-41	-1.6	1.1	1.1	1.2
42-44	+0.3	1.4	1.8	2.4
45-47	-6.6	3.6	3.7	3.8
48-50	-1.2	2.4	3.0	4.0
51-53	+6.4	3.8	4.3	5.5
54-55	-5.1	4.2	4.4	5.4
56-58	+4.7	3.5	4.5	5.8
59-60	+12.8	3.8	4.6	6.4
61-62	+18.4	4.1	4.9	6.5
63-64	+25.3	3.5	4.6	6.0
65-66	+2.9	3.8	4.4	5.5
67-69	+15.6	2.5	3.0	4.3
70-72	+20.0	2.1	2.5	3.3
73-75	+8.6	2.2	2.6	3.5
76-80	+9.9	1.5	1.8	2.4
81-100	+4.4	1.1	1.3	1.8

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 6 (Fourth-quintile (80<sup>th</sup>-percentile) line): Errors in households' poverty rates at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals**

Sample Size <i>n</i>	Difference between estimate and observed value			
	Error	Confidence interval ( $\pm$ percentage points)		
		90-percent	95-percent	99-percent
1	+0.3	65.7	79.4	94.8
4	+4.6	36.8	43.0	55.6
8	+5.0	27.6	33.1	42.4
16	+5.9	20.5	25.5	31.8
32	+6.5	14.8	18.7	24.3
64	+6.8	11.1	13.5	17.4
128	+6.7	7.7	9.4	13.1
256	+6.8	5.5	6.7	8.4
512	+6.8	3.9	4.6	5.8
1,024	+6.9	3.0	3.4	4.5
2,048	+7.0	2.1	2.4	3.3
4,096	+7.0	1.4	1.6	2.1
8,192	+7.0	1.0	1.1	1.6
16,384	+7.0	0.7	0.8	1.1

Scorecard applied to 1,000 bootstraps from the validation sample.

**Table 9 (Fourth-quintile (80<sup>th</sup>-percentile) line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC**

Targeting cut-off	<b>Inclusion:</b> Poor correctly targeted	<b>Undercoverage:</b> Poor mistakenly not targeted	<b>Leakage:</b> Non-poor mistakenly targeted	<b>Exclusion:</b> Non-poor correctly not targeted	<b>Hit rate</b> Inclusion + Exclusion	<b>BPAC</b> See text
<=25	4.8	63.0	0.0	32.1	37.0	-85.7
<=32	10.7	57.1	0.2	32.0	42.6	-68.2
<=35	14.6	53.2	0.3	31.9	46.5	-56.4
<=38	19.4	48.4	0.4	31.8	51.1	-42.3
<=41	24.2	43.6	0.5	31.6	55.8	-27.8
<=44	29.1	38.7	0.8	31.4	60.5	-13.1
<=47	34.5	33.3	1.2	31.0	65.5	+3.5
<=50	39.3	28.5	1.8	30.4	69.7	+18.6
<=53	44.8	23.0	2.9	29.3	74.0	+36.4
<=55	47.7	20.1	3.4	28.7	76.4	+45.7
<=58	52.1	15.7	5.2	27.0	79.1	+61.3
<=60	55.2	12.6	7.1	25.1	80.2	+73.2
<=62	57.7	10.1	9.2	23.0	80.7	+83.6
<=64	59.8	8.1	11.1	21.1	80.9	+83.7
<=66	62.0	5.8	14.7	17.4	79.5	+78.3
<=69	64.2	3.6	18.4	13.8	78.0	+72.9
<=72	65.4	2.4	21.6	10.6	76.1	+68.2
<=75	66.6	1.3	25.2	7.0	73.6	+62.9
<=80	67.4	0.4	29.0	3.2	70.7	+57.3
<=100	67.8	0.0	32.2	0.0	67.8	+52.5

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

**Table 10 (Fourth-quintile (80<sup>th</sup>-percentile) line): Share of all households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted**

Targeting cut-off	% all HHs who are targeted	% targeted HHs who are poor	% poor HHs who are targeted	Poor HHs targeted per non-poor HH targeted
<=25	4.9	99.3	7.1	150.1:1
<=32	10.9	97.9	15.7	46.1:1
<=35	14.9	98.1	21.6	51.9:1
<=38	19.8	97.9	28.6	46.9:1
<=41	24.7	97.8	35.7	44.2:1
<=44	29.9	97.4	42.9	37.6:1
<=47	35.7	96.8	50.9	29.9:1
<=50	41.1	95.6	58.0	21.9:1
<=53	47.7	93.9	66.0	15.3:1
<=55	51.1	93.3	70.3	13.8:1
<=58	57.3	91.0	76.8	10.1:1
<=60	62.3	88.6	81.4	7.7:1
<=62	66.8	86.3	85.0	6.3:1
<=64	70.8	84.4	88.1	5.4:1
<=66	76.8	80.8	91.5	4.2:1
<=69	82.6	77.7	94.6	3.5:1
<=72	87.0	75.2	96.5	3.0:1
<=75	91.7	72.6	98.1	2.6:1
<=80	96.4	70.0	99.4	2.3:1
<=100	100.0	67.8	100.0	2.1:1

Scorecard applied to the validation sample.