Simple Poverty Scorecard® Poverty-Assessment Tool Cambodia

Mark Schreiner

20 February 2015

This document is at `SimplePovertyScorecard.com`

Abstract

The Simple Poverty Scorecard-brand poverty-assessment tool uses ten low-cost indicators from the 2011 Cambodia Socio-Economic Survey to estimate the likelihood that a household has consumption below a given poverty line. Field workers can collect responses in about ten minutes. The scorecard's accuracy is reported for a range of poverty lines. The scorecard is a practical way for pro-poor programs in Cambodia to measure poverty rates, to track changes in poverty rates over time, and to segment clients for targeted services.

Version note

This paper uses 2011 data and new definitions of *poverty* from the government of Cambodia and from the World Bank. It replaces Schreiner (2009a), which uses 2004 data and an older definition of *poverty*. The new 2011 scorecard here and its new definitions of *poverty* should be used from now on. Existing users of Schreiner (2009a) can still measure change over time using old-definition poverty lines with a baseline from the 2004 scorecard and a follow-up from the 2011 scorecard.

Simple Poverty Scorecard® Poverty-Assessment Tool

Interview ID: _____	**Name**	**Identifier**
Interview date: _____	Participant: _____	_____
Country: KHM	Field agent: _____	_____
Scorecard: 002	Service point: _____	_____
Sampling wgt.: _____	Number of household members:	_____

Indicator	Response	Points	Score
1. How many members does the household have?	A. Eight or more	0	
	B. Seven	7	
	C. Six	9	
	D. Five	17	
	E. Four	22	
	F. Three	32	
	G. One or two	40	
2. In the past 7 days, how many household members did any work at all, even one hour, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, weaving, etc., or working in a business or workplace (private or public sector, on their own account, or in a business belonging to someone else in the household)?	A. None or one	0	
	B. Two	3	
	C. Three or more	5	
3. Can the female head/spouse read or write a simple message in any language?	A. No	0	
	B. No female head/spouse	1	
	C. Yes	2	
4. How many rooms in the dwelling unit are used by the household (other than kitchen, toilet, bathrooms, and store-rooms)?	A. One	0	
	B. Two	5	
	C. Three or more	12	
5. What is the primary construction material of the wall of the dwelling unit occupied by the household?	A. Bamboo, thatch/leaves, grass, makeshift or mixed materials, clay/dung with straw, or other	0	
	B. Wood, logs, plywood, galvanized iron or aluminium or other metal sheets, or fibrous cement/asbestos	3	
	C. Concrete, brick, or stone	4	
6. What is the primary construction material of the roof of the dwelling unit occupied by the household?	A. Thatch/leaves, grass, plastic sheets, salvaged materials, mixed but predominantly thatch/leaves/grass/salvaged materials, or other	0	
	B. Galvanized iron or aluminium, or mixed but predominantly galvanized iron/aluminium/tiles/fibrous cement	1	
	C. Tiles, fibrous cement, or concrete	4	
7. How many wardrobes or cabinets does the household own?	A. None	0	
	B. One	6	
	C. Two or more	8	
8. Does the family own a television or a video/VCD/DVD player/recorder?	A. No	0	
	B. Only television	3	
	C. Video/VCD/DVD (regardless of TV)	6	
9. How many landline telephones and cell phones does the household own?	A. None	0	
	B. One	4	
	C. Two or more	9	
10. How many motorcycles or motor boats does the household own?	A. None	0	
	B. One	6	
	C. Two or more	10	

Score:

Back-page Worksheet: Household Members, Age, and Work Status

Record the name and identification number of the client and of yourself as the enumerator, as well as the service point that the client uses. Record the interview date and the date when the client first participated with the organization.

Then read to the respondent: *Please tell me the first name and age of each household member. A* household *is one or more people—regardless of kinship ties—who usually live together and share an arrangement for food, such as using a common kitchen or sharing a food budget. The members do not have another permanent residence, and their actual or planned stay with the household is at least one year. Migrant or commuting workers (such as garment workers) count if they visit the household at least once a month.*

Write down the first name and age of each household member, noting the female head/spouse (if any). Then record the total number of members in the scorecard header next to "# Household members:", and circle the response to the first scorecard indicator.

For each member 5-years-old or older, ask: *In the past 7 days, did <name> do any work at all, even one hour, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, weaving, etc., or working in a business or workplace (private or public sector, on his/her own account, or in a business belonging to someone else in the household)?* Count those marked "Yes", and circle the response for the second indicator.

Always keep in mind the full definitions of *household, household member*, and *work* in the "Guidelines for the Interpretation of Scorecard Indicators".

First name	Age	If <name> is 5-years-old or older, did he/she do any work at all in the past 7 days, even one hour, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, weaving, etc., or working in a business or workplace (private or public sector, on his/her own account, or in a business belonging to someone else in the household)?		
1.		Not ≥5	No	Yes
2.		Not ≥5	No	Yes
3.		Not ≥5	No	Yes
4.		Not ≥5	No	Yes
5.		Not ≥5	No	Yes
6.		Not ≥5	No	Yes
7.		Not ≥5	No	Yes
8.		Not ≥5	No	Yes
9.		Not ≥5	No	Yes
10.		Not ≥5	No	Yes
11.		Not ≥5	No	Yes
12.		Not ≥5	No	Yes
13.		Not ≥5	No	Yes
14.		Not ≥5	No	Yes
15.		Not ≥5	No	Yes
Members:				# "Yes":

Look-up table to convert scores to poverty likelihoods for World-Bank-definition poverty lines

| | Poverty likelihood (%) | | | | | | | |
| | National poverty lines | | | | Intl. 2005 PPP | | | |
Score	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
0–4	100.0	100.0	100.0	96.0	42.0	100.0	100.0	100.0
5–9	94.9	100.0	100.0	84.9	42.0	95.6	95.9	100.0
10–14	88.6	100.0	100.0	71.8	17.4	91.5	92.1	100.0
15–19	73.8	97.1	100.0	41.4	10.1	77.5	92.1	100.0
20–24	60.7	96.4	100.0	31.7	9.3	62.0	91.9	100.0
25–29	46.6	93.3	97.5	23.3	7.5	52.5	79.4	99.5
30–34	34.3	86.6	97.5	15.3	4.1	39.4	73.7	99.5
35–39	20.2	74.6	96.5	6.0	0.4	24.6	55.0	99.5
40–44	10.5	62.4	90.0	2.9	0.2	14.8	43.1	98.6
45–49	5.5	42.5	76.8	0.8	0.1	8.4	25.2	93.1
50–54	0.7	31.4	70.2	0.0	0.0	1.9	15.9	89.2
55–59	0.2	15.1	45.4	0.0	0.0	1.0	5.3	72.2
60–64	0.2	9.0	38.7	0.0	0.0	0.5	1.0	67.3
65–69	0.0	2.1	14.7	0.0	0.0	0.0	0.6	49.8
70–74	0.0	0.0	6.8	0.0	0.0	0.0	0.0	25.7
75–79	0.0	0.0	5.6	0.0	0.0	0.0	0.0	19.6
80–84	0.0	0.0	1.6	0.0	0.0	0.0	0.0	15.3
85–89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Look-up table to convert scores to poverty likelihoods for old-definition poverty lines

	Poverty likelihood (%)				
	National poverty lines			Intl. 2005 PPP	
Score	100%	150%	200%	$1.25	$2.50
0–4	87.6	100.0	100.0	73.5	100.0
5–9	57.8	91.4	99.7	32.0	94.5
10–14	51.5	89.6	98.7	30.3	94.5
15–19	40.7	80.3	95.0	21.2	85.0
20–24	30.4	74.8	92.4	14.2	80.0
25–29	20.8	66.4	87.8	9.7	75.2
30–34	14.5	51.9	78.0	5.4	62.0
35–39	8.4	43.3	74.3	2.3	54.1
40–44	4.9	28.4	58.6	1.6	37.5
45–49	3.4	21.5	48.5	0.9	27.5
50–54	1.1	12.0	32.7	0.3	18.4
55–59	0.5	5.9	21.8	0.2	10.4
60–64	0.4	2.8	12.0	0.2	5.6
65–69	0.2	1.2	3.9	0.1	1.7
70–74	0.0	0.2	2.3	0.0	0.8
75–79	0.0	0.0	0.4	0.0	0.2
80–84	0.0	0.0	0.0	0.0	0.0
85–89	0.0	0.0	0.0	0.0	0.0
90–94	0.0	0.0	0.0	0.0	0.0
95–100	0.0	0.0	0.0	0.0	0.0

Look-up table to convert scores to poverty likelihoods for government-definition poverty lines

	Poverty likelihood (%)							
	National poverty lines				Intl. 2005 PPP			
Score	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
0–4	100.0	100.0	100.0	55.8	41.4	100.0	100.0	100.0
5–9	91.9	97.8	100.0	55.8	41.4	91.9	95.4	100.0
10–14	74.5	95.8	100.0	55.8	26.4	80.8	91.3	100.0
15–19	59.8	95.8	100.0	31.7	11.8	64.3	88.0	100.0
20–24	50.5	94.8	100.0	25.8	10.0	59.7	87.3	100.0
25–29	41.4	87.3	96.0	23.1	9.6	54.9	80.3	99.7
30–34	29.7	80.5	95.1	15.1	6.3	38.4	75.1	98.5
35–39	21.0	66.4	92.3	8.0	1.0	27.3	58.3	97.6
40–44	9.3	54.0	86.5	3.2	0.7	16.1	44.8	96.7
45–49	7.9	41.6	75.0	2.3	0.3	10.9	31.1	93.5
50–54	4.7	35.8	68.9	2.0	0.1	8.1	25.2	90.6
55–59	3.2	24.1	54.2	0.5	0.1	5.1	16.5	82.8
60–64	1.3	17.5	49.6	0.5	0.0	1.9	7.9	78.9
65–69	1.1	9.3	34.4	0.4	0.0	1.6	6.3	68.8
70–74	0.0	4.2	18.7	0.0	0.0	0.0	0.6	51.7
75–79	0.0	1.1	12.2	0.0	0.0	0.0	0.0	50.8
80–84	0.0	0.0	9.2	0.0	0.0	0.0	0.0	45.4
85–89	0.0	0.0	8.8	0.0	0.0	0.0	0.0	33.8
90–94	0.0	0.0	6.8	0.0	0.0	0.0	0.0	29.1
95–100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1

Note on measuring changes in poverty rates over time using the old definition of *poverty* with the old 2004 and new 2011 scorecards

This paper uses data from the 2011 CSES and two new definitions of *poverty* from the government of Cambodia and from the World Bank. It replaces Schreiner (2009a), which uses data from the 2004 CSES and an older definition of *poverty*. The new 2011 scorecard should be used from now on.

Some organizations in Cambodia already use the old 2004 scorecard. Even after switching to the new 2011 scorecard, these legacy users can still estimate hybrid changes in poverty rates over time with existing baseline estimates from the old 2004 scorecard and follow-up estimates from the new 2011 scorecard.[1] This is possible because the new 2011 scorecard is calibrated not only to the government- and World-Bank definitions of *poverty* but also to the old definition of *poverty*. Given the assumptions discussed below, valid hybrid estimates of change can be found for the old definition of *poverty* with a baseline measure from the old 2004 scorecard and a follow-up measure from the new 2011 scorecard.

For hybrid estimates of change to be valid, indicators in the new 2011 scorecard must be based on items with the same wording, response options, and interpretations in both the 2009 and 2011 CSES. This is the "identical items" assumption, and it holds perfectly in Cambodia's 2009 and 2011 CSES.

---

[1] See the appendix for a step-by-step guide to the calculations.

A hybrid estimate of change based on the old definition of *poverty* can be spliced together with non-hybrid estimates of change based on the new government or World-Bank definitions if poverty rates change at the same rate under both the old and new definitions. This is the "parallel lines" assumption.

In Cambodia, the "parallel lines" assumption does not hold perfectly, but it holds better for the World-Bank definition than for the government definition.[2] This is a source of bias for estimates of change that splice hybrid (old-definition) estimates with non-hybrid (government or World-Bank) estimates. Nevertheless, this spliced hybrid/non-hybrid approach is the only way to salvage baseline estimates based on the old 2004 scorecard. Of course, being the only alternative does not necessarily make it an attractive or useful alternative for all purposes. Users of spliced hybrid/non-hybrid estimates of changes should "be careful" and "use caution". Taking these otherwise-hollow caveats seriously means either eschewing spliced hybrid/non-hybrid estimates altogether or explicitly discussing how the failure of the "parallel lines" assumption might affect accuracy. For example, users might require larger-than-usual estimates of change before being willing to modify decisions based on evidence from spliced hybrid/non-hybrid estimates. That is, the point at which a spliced estimate is considered to be too "small" to be counted as non-zero is greater than it would be if the

---

[2] The annual percentage-point rate of decrease is 4.0 for the old definition, 5.6 for the government definition, and 4.7 for the World-Bank definition (see section 2).

"parallel lines" assumption held better. Unfortunately, there is no global, objective benchmark for how small is "small".

In sum, both first-time and legacy users should use the new 2011 scorecard and the government and/or World-Bank definitions *poverty* from now on. Looking forward, this establishes a baseline with the best, most-relevant definitions of *poverty*. Looking backward, legacy users of Cambodia's old scorecard (Schreiner, 2009a) can salvage existing estimates to find hybrid measures of change in old-definition poverty rates over time.

Simple Poverty Scorecard® Poverty-Assessment Tool Cambodia

1. Introduction

Pro-poor programs in Cambodia can use the Simple Poverty Scorecard poverty-assessment tool to estimate the likelihood that a household has expenditure below a given poverty line, to measure groups' poverty rates at a point in time, to track changes in groups' poverty rates over time, and to segment clients for targeted services.

The new scorecard here uses data from Cambodia's 2011 Socio-Economic Survey (CSES); it replaces the old scorecard in Schreiner (2009a) that uses data from the 2004 CSES. For now on, only the new 2011 scorecard should be used. The new 2011 scorecard can estimate a household's poverty likelihood based on the old definition of *poverty* with 2009 data as well as a household's poverty likelihood based on the new government and World-Bank definitions with 2011 data. This means that existing users of the old 2004 scorecard do not have to start over from scratch; they can estimate changes in old-definition poverty rates over time with a baseline from the old 2004 scorecard and a follow-up from the new 2011 scorecard.

The direct approach to poverty measurement via consumption surveys is difficult and costly. As a case in point, Cambodia's 2011 CSES has 58 pages and includes

1

almost 500 items, most of which may be asked multiple times (for example, for each household member, each agricultural plot, or each crop). Over a four-week period, a responding household kept a diary of income, expenditure, and consumption. Responding households were visited by an enumerator four times.

In comparison, the indirect approach via the scorecard is simple, quick, and inexpensive. It uses ten verifiable indicators (such as "What is the primary construction material of the roof of the dwelling unit occupied by the household?" and "How many wardrobes or cabinets does the household own?") to get a score that is highly correlated with poverty status as measured by the exhaustive CSES survey.

The scorecard differs from "proxy-means tests" (Coady, Grosh, and Hoddinott, 2004) in that it is transparent, it is freely available,[3] and it is tailored to the capabilities and purposes not of national governments but rather of local, pro-poor organizations. The feasible poverty-measurement options for local 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 measures 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 measure the share of a program's participants who are below a given poverty line, for example, the Millennium Development Goals'

---

[3] The Simple Poverty Scorecard tool for Cambodia is not, however, in the public domain. Copyright is held by the sponsor and by Microfinance Risk Management, L.L.C.

$1.25/day line at 2005 purchase-power parity (PPP). USAID microenterprise partners in Cambodia can use scoring with the World-Bank-definition median poverty line to report how many of their participants are "very poor".[4] Scoring can also be used to measure net movement across a poverty line over time. In all these applications, the scorecard provides a consumption-based, objective tool with known accuracy. While consumption surveys are costly even for governments, some local pro-poor organizations may be able to implement the low-cost scorecard to help with poverty monitoring and (if desired) segmenting clients for targeted services.

The statistical approach here aims to be understood by non-specialists. After all, if 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 simplicity build trust. Getting "buy-in" matters; proxy-means tests and regressions on the "determinants of poverty" have been around for three decades, but they are rarely used to inform decisions by local, pro-poor organizations. This is not because they 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

---

[4] USAID defines a household as *very poor* if its daily per-capita consumption is less than the highest of the World-Bank-definition $1.25/day line (KHR3,000 on average in 2011, Figure 1) or the "median" line that divides people below 100% of the World-Bank-definition national line into two equal-size groups (KHR3,825). USAID (2012, p. 7) has approved scorecards that are re-branded as Progress Out of Poverty Indexes® for use by their microenterprise partners.

the predictive-modeling phenomenon known as the "flat maximum", simple scoring

approaches can be about as accurate as complex ones (Schreiner, 2012a; Caire and

Schreiner, 2012).

Beyond its simplicity 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 simple and commonplace in statistical practice and in the for-profit

field of credit-risk scoring, they have rarely been applied to poverty-assessment tools.

The scorecard is based on data from the 2011 CSES done by Cambodia's

National Institute of Statistics (NIS). Indicators are selected to be:

- Inexpensive to collect, easy to answer quickly, and simple to verify
- Strongly correlated with poverty
- Liable to change over time as poverty status changes
- Applicable in all regions of Cambodia

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 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 consumption below a given poverty line.

Second, the scorecard can estimate the poverty rate of a group of households at a

point in time. This estimate is the average of poverty likelihoods among the households

in the group.

Third, the scorecard can estimate changes in the poverty rate for a group of households (or for two independent samples of households, both of which are representative of the same population) between two points in time. This estimate is the average of the baseline/follow-up annual rate of change in the poverty likelihoods of households in the group(s).

The scorecard can also be used to target services to different segments of participants. To help managers choose appropriate targeting cut-offs for their purposes, this paper reports several measures of targeting accuracy for a range of possible cut-offs.

This paper presents a single scorecard whose indicators and points are derived with the World-Bank definition of *poverty* applied to data from the 2011 CSES. Scores from this one scorecard are calibrated to poverty likelihoods for eight World-Bank-definition poverty lines with data from the 2011 CSES, to poverty likelihoods for eight government-definition poverty lines with data from the 2011 CSES, and to poverty likelihoods for five old-definition poverty lines with data from the 2009 CSES.[5]

The new 2011 scorecard is constructed using half of the data from the 2011 CSES. That same half of the 2011 data is also used to calibrate scores to poverty likelihoods for the government and World-Bank definitions of *poverty*. The other half of the 2011 CSES data is used to validate the scorecard's accuracy for estimating

---

[5] Section 2 below discusses the three definitions of *poverty*.

households' poverty likelihoods for these two definitions, for estimating groups' poverty rates at a point in time, and for segmenting clients.

Old-definition poverty status has not been calculated for the 2011 and 2012 CSES, so old-definition poverty likelihoods are calibrated with scores[6] based on data from half of the 2009 CSES. The other half of the 2009 data is then used to validate accuracy.

The accuracy of estimated changes in poverty rates over time for the population is tested using data from pairs of CSES rounds for which poverty status for a given definition of *poverty* has been calculated.

All three scoring-based estimators (the poverty likelihood of a household, the poverty rate of a group of households at a point in time, and the average annual rate of change in the poverty likelihoods of households in a group between two points in time) are *unbiased.* That is, they match the true value on average in repeated samples when constructed from (and applied to) a single, unchanging population in which the relationship between scorecard indicators and poverty is constant. Like all predictive models, the scorecard here is constructed from a single sample and so misses the mark to some unknown extent when applied (in this paper) to a validation sample. Furthermore, it is biased when applied (in practice) to a different population, or before

---

[6] All scores come from applying the new 2011 scorecard.

or after 2011,[7] or as the relationship between indicators and poverty changes as time passes.

Thus, while the indirect scoring approach is less costly than the direct survey approach, it is also biased when applied in practice. (The survey approach is unbiased by definition.) There is bias because the scorecard necessarily assumes that the future relationships between indicators and poverty in all possible groups of households will be the same as in the construction data. Of course, this assumption—inevitable in predictive modeling—holds only partly.

On average across 1,000 bootstraps of $n = 16{,}384$ from the 2011 validation sample, the difference between scorecard estimates of groups' poverty rates versus the true rates at a point in time for the World-Bank-definition national poverty line is +1.1 percentage points. Across the eight World-Bank-definition poverty lines, the average absolute difference is about 0.9 percentage points, and the maximum absolute difference is 1.7 percentage points.[8] These differences are due to sampling variation, not bias; the average difference would be zero if the whole 2011 CSES were to be repeatedly re-

---

[7] Important examples include nationally representative samples at a later point in time or sub-groups that are not nationally representative (Diamond *et al.*, 2014; Tarozzi and Deaton, 2007).

[8] For old-definition poverty in the 2009 validation sample, bias for the national line is –0.7 percentage points, average absolute bias across the eight old-definition lines is about 0.4 percentage points, and the maximum absolute bias for any given line is 0.7 percentage points. For government-definition lines, the coresponding results in the 2011 validation sample are +1.8, 1.4, and 2.9 percentage points.

fielded and divided into sub-samples before repeating the entire process of constructing and validating scorecards.

The 90-percent confidence intervals are ±0.6 percentage points or less across all poverty lines under all definitions. For $n = 1{,}024$, the 90-percent intervals are ±2.4 percentage points or less.

To check the accuracy and precision of estimates of changes in poverty rates over time, the new 2011 scorecard is applied to data from pairs of CSES rounds, with one year as the baseline and the other as the follow-up.[9] This produces 33 estimates of change across the three definitions of poverty and the poverty lines associated with them. Using 1,000 bootstraps with $n = 16{,}384$, the average ratio of the absolute value of the difference between scorecard estimate's of change versus the true change, divided by the absolute value of true change, is 117 percent. That is, the size of the bias of the estimated change averages more than the size of the true change.

While the relative absolute error in the size of the Cambodia scorecard's estimates of changes in poverty rates is disappointing, the scorecard correctly estimates the direction of change (that is, whether poverty increased or decreased) in two-thirds of cases (26 of 33). All seven misses occur in one- or two-year periods (between 2009/11

---

[9] World-Bank-definition lines use the 2011 validation sample (baseline) and the full 2004 and 2009 CSES (follow-ups). Government-definition lines use the 2011 validation sample (baseline) and the full 2009 and 2012 CSES (follow-ups). Old-definition lines use the full 2004 CSES (baseline) and the full 2009 CSES (follow-up).

and 2011/12), and none of these seven estimates of directional change are statistically different from zero (90-percent confidence, $n = 1,024$).

In sum, Cambodia's scorecard usually gets the direction of change right, although the average error in the estimated size of the change is roughly the same as the size of the true change.[10] This is disappointing, relative to the hope that the scorecard can estimate both the sign and size of changes with usefully high accuracy. Of course, accuracy might be greater (or worse) in other countries with other scorecards and other data.

Section 2 below documents data and poverty lines. Sections 3 and 4 describe scorecard construction and offer guidelines for use in practice. Sections 5 and 6 tell how to estimate households' poverty likelihoods and groups' poverty rates at a point in time. Section 7 discusses estimating changes in poverty rates over time. Section 8 covers targeting. Section 9 places the scorecard here in the context of related exercises for Cambodia. The last section is a summary.

The appendix gives step-by-step instructions for how to compute hybrid estimates of change with old-definition poverty lines that combine a baseline from the old 2004 scorecard and a follow-up from the new 2011 scorecard.

---

[10] For example, if the true change is –10 percentage points, then bias of about the same size as the size of the true change means that scorecard estimate is about –20 percentage points or about 0 percentage points, giving an error of 10 percentage points.

The "Guidelines for the Interpretation of Scorecard Indicators" tells how to ask questions (and how to interpret responses) so as to mimic practice in the CSES as closely as possible. The "Guidelines" (and the "Backpage Worksheet") are integral parts of the Simple Poverty Scorecard tool.

2. Data and definitions of poverty status

This section discusses the data used to construct and validate the scorecard. It also documents the definitions of *poverty* and the poverty lines to which scores are calibrated.

2.1 Data

The indicators and points for the new 2011 scorecard are selected (*constructed*) based on a random half of the data from the 3,586 households in the 2011 CSES. This is Cambodia's most recent national consumption survey for which data on poverty status is available on poverty status under each of the old, government, and World-Bank definitions.

The half of the 2011 data used in scorecard construction is also used to associate (*calibrate*) scores to poverty likelihoods under the government and World-Bank definitions. Calibration for old-definition likelihoods uses the 2009 CSES, as this is the latest data for which old-definition poverty status has been computed.[11]

For checking (*validating*) accuracy, this paper also uses data that was not used for calibration under a given definition of *poverty* from the 2004 CSES (old and World-

---

[11] It is valid to calibrate scores from the new 2011 scorecard with poverty likelihoods with 2009 data because the "identical-items" assumption holds and because the old-definition poverty lines are constant in real terms over time.

Bank definitions), 2009 CSES (all three definitions), 2011 CSES (all three definitions) and 2012 CSES (government definition).

This complexity is due to the fact that Cambodia has three definitions of *poverty*, but data for all definitions are not available in all four CSES rounds:

- Old-definition data exist only for 2004 and 2009
- Government-definition data exist only for 2009, 2011, and 2012
- World-Bank-definition data exist only for 2004, 2009, and 2011

In each CSES round, field work ran for the calendar year, and consumption is expressed in average annual prices. Sampling weights in each CSES round differ with the definition of *poverty*. Likewise, the measure of consumption depends on the definition of *poverty*. Given a poverty line and a definition of *poverty*, the calculations here use the relevant measure of consumption and the relevant sampling weights. In particular, the new 2011 scorecard is constructed using World-Bank-definition sampling weights, but calibration and validation use the sampling weights associated with a given definition of *poverty*.

2.2   Poverty rates at the household, person, or participant level

A *poverty rate* is the share of units in households in which total household consumption (divided by the number of household members) is below a given poverty line. The unit of analysis is either the household itself or a person in the household. Each household member has the same poverty status (or estimated poverty likelihood) as the other household members.

Suppose a program serves two households. The first household is poor (its per-capita 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 equal-weighted average of poverty statuses (or estimated poverty likelihoods) across households with participants. In the example here, this is $\frac{1 \cdot 1 + 1 \cdot 0}{1 + 1} = \frac{1}{2} = 0.5 = 50$ percent. In the "$1 \cdot 1$" term in the numerator, the first "1" is the first household's weight, and the second "1" is the first household's poverty status (poor). In the "$1 \cdot 0$" term in the numerator, the "1" is the second household's weight, and the "0" is the second household's poverty status (non-poor). The "$1 + 1$" in the denominator is the sum of the weights of the two households. Each household has a weight of one (1) because the unit of analysis is the household.

Alternatively, a person-level rate is relevant if a program defines all people in households that benefit from its services as *participants*. In the example here, the person-level rate is the household-size-weighted average of poverty statuses for households with participants, or $\frac{3 \cdot 1 + 4 \cdot 0}{3 + 4} = \frac{3}{7} = 0.43 = 43$ percent. In the "$3 \cdot 1$" term in the numerator, the "3" is the first household's weight because it has three members, and the "1" is its poverty status (poor). In the "$4 \cdot 0$" term in the numerator, the "4" is

the second household's weight because it has four members, and the zero is its poverty status (non-poor). The "$3 + 4$" in the denominator is the sum of the weights of the two households. A household's weight is its number of members because the unit of analysis is the household member.

As a final example, a program might count as *participants* only those household members with whom it deals with directly. For the example here, this means that some—but not all—household members are counted. The person-level rate is now the participant-weighted average of the poverty statuses of households with participants, or

$$\frac{1 \cdot 1 + 2 \cdot 0}{1 + 2} = \frac{1}{3} = 0.33 = 33 \text{ percent.}$$ The first "1" in the "$1 \cdot 1$" in the numerator is the first household's weight because it has one participant, and the second "1" is its poverty status (poor). In the "$2 \cdot 0$" term in the numerator, the "2" is the second household's weight because it has two participants, and the zero is its poverty status (non-poor). The "$1 + 2$" in the denominator is the sum of the weights of the two households. Each household's weight is its number of participants because the unit of analysis is the participant.

To sum up, estimated poverty rates are weighted averages of households' poverty statuses (or estimated poverty likelihoods), where the weights are the number of relevant units in the household. When reporting, organizations should explain who is counted as a *participant* and why.

Figure 1 (in three versions, one for each definition of *poverty*) reports poverty rates for households and people for all relevant poverty lines and years, for Cambodia

as a whole and for Cambodia's three poverty-line regions, and for any construction/calibration or validation sub-samples. 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. This is also why the scorecard is constructed, calibrated, and validated with household weights. Person-level poverty rates are also included in Figure 1 because these are the rates reported by the Cambodia government and by the World Bank and because person-level rates are the type used in most policy discussions.

2.3   Definitions of *poverty*

Poverty is whether a household is poor or non-poor. In Cambodia, poverty status is determined by whether per-capita aggregate household consumption is less than a poverty line. Thus, a definition of *poverty* has two aspects: a measure of household consumption, and a poverty line.

2.3.1 Old-definition poverty

Knowles (2012 and 2006a) applies the old definition of *poverty* with the 2004 and 2009 CSES. The old definition was first used for Cambodia by Prescott and Pradhan (1997), and they follow the approach of Ravallion (1998) that is international common practice. The definition of *consumption* is in line with Deaton and Zaidi (2002), in particular in its imputing a use-value to non-rented housing. Consumption under the old definition differs from Deaton/Zaidi in that it includes all health-care expenditures

15

and in that it—due to gaps in the CSES—does not impute a use-value for consumer durables but rather counts as as consumption any expenditure on the purchase of consumer durables during the survey year.

The national poverty line by the old definition is defined as the sum of minimum consumption standards for food and non-food items. The food standard is the observed cost—for people in the middle quintile of expenditure—of a reference food basket providing 2,100 Calories. The non-food standard is the observed non-food consumption of households whose *total* consumption is at the food line.[12]

The old-definition national poverty line is then the sum of the minimum standards for food and non-food, adjusted for differences in prices across Cambodia's three poverty-line regions (Phnom Phen, other urban, and rural). In the 2009 (2004) CSES, the all-Cambodia national line is KHR3,328 (1,825), giving poverty rates of 11.7 percent (30.2) for households and 14.6 percent (34.7) for people (Figure 1).[13] Knowles (2012) points out that more than 80 percent of poor people in 2009 are rural. He also triangulates evidence from various non-CSES sources to make a good case that the massive drop in poverty from 2009 to 2004 is real.

---

[12] A common alternative is to define the minimum non-food consumption as that observed for households whose *food* consumption (not *total* consumption) matches the food line. This alternative results in a higher poverty line and a higher poverty rate.
[13] The person-level poverty rates in Figure 1 match those in Knowles (2012 and 2006a).

2.3.2 Government-definition poverty

Ministry of Planning (2014 and 2013) explains how the government definition (applied to the 2009, 2011, and 2012 CSES) differs from the old definition:

- The measure of consumption excludes:
  — Use-value of owner-occupied housing and other non-rental arrangements
  — Luxury/vice items that the poor rarely consume
- The derivation of the national poverty line:
  — Uses a food basket of 2,200 Calories (versus 2,100 under the old definition)
  — Derives food-basket quantities from data on people in the 5th to 30th percentiles of total consumption (versus the middle quintile)
  — Prices food items in a different way
  — Sets the non-food standard as the average non-food consumption of people in the third decile (rather than the average non-food consumption people whose total consumption is close to the minimum standard for food)
  — Adds a token value for clean water (rather than no such addition)

In 2009, government-definition lines are higher than old-definition lines, and consumption—due to the omission of the use-value of non-rented housing—is generally lower, especially in urban areas. Both factors lead to higher poverty rates in all three poverty-line regions. For example, the person-level poverty rate for the national line in 2009 in Phnom Phen is 1.8 percent under the old definition but 12.8 percent under the government definition (Figure 1). For "other urban" areas, the difference is 6.9 percent versus 19.3.

The government definition of *poverty* takes a couple of steps away from the old definition and its following of Ravallion (1998) and Deaton and Zaidi (2002), without offering many strong reasons for doing so. Of course, all poverty lines are arbitrary to some degree in some dimensions, and the government-definition changes are not

"wrong" nor completely without merit, and some are innocuous. It is difficult, however, to defend the omission of the use-value of non-rented housing.

What motivates the government definition? Ministry of Planning (2013) rightly notes that it is normal and appropriate to update the definition of *poverty* as time passes. It also says twice (p. 4 and 11) that the higher all-Cambodia poverty rates (22.7 percent of people by the government-definition national line in 2009, versus 14.6 percent by the old definition, and especially the higher urban poverty rates, Figure 1) are closer to those implied by Cambodia's IDPoor program,[14] "thereby lending them greater credence." Ministry of Planning (2013, p. 11) says that the higher urban poverty rates "will allow policymakers to become conscious of the gravity of urban poverty."

2.3.3 World-Bank-definition poverty

Like the government definition, the World-Bank definition (applied to the 2004, 2009, and 2011 CSES) uses a 2,200 Calorie standard.[15] Beyond that, the World-Bank definition resembles the old definition in that it follows Ravallion (1998) and Deaton and Zaidi (2002), but with an updated food basket (based on data from 2009 rather

---

[14] See section 9.

[15] This is one of three apects in which the World Bank's original methological choice was modified to fit the preferences of the government (World Bank, 2014, pp. 93–94). The World Bank also decided not to add 10 percent to the total cost of the food basket to account for wastage and not to impute a use-value to consumer durables.

than 1993/4) and with better data on regional prices (World Bank, 2014). In particular, the World-Bank definition:

- Includes the use-value of non-rented housing in its measure of consumption
- Takes the minimum non-food standard in its derivation of the national poverty line as the observed non-food consumption of households whose total consumption is within 10 percent of the minimum food standard in 2009

The World Bank and the government compared their person-level poverty rates for the national line in 2009 and 2011 (23.9 and 20.5 percent for World Bank, 22.7 and 19.8 percent for the government, Figure 1)[16] and "agreed that the results were very similar" (World Bank, p. 8).

Even though the all-Cambodia rates are similar across the two definitions, the regional rates differ a lot. In Phnom Phen in 2009 and 2011, for example, poverty rates for the national line are 4.3 and 1.5 percent for the World Bank versus 12.8 and 10.9 percent for the government, and the poverty rate in "other urban" areas is 12.7 and 16.1 percent for the World Bank and 19.3 and 22.5 percent for the government.[17] The all-Cambodia rates for the two definitions are close because more than 80 percent of poor people are rural, and the two definitions' give rural poverty rates in 2009 and 2011 that differ by about 3 percentage points (27.5 and 23.7 percent for the World Bank, and 24.4 and 20.7 percent for the government).

---

[16] In all years in Figure 1, the all-Cambodia and regional person-level poverty rates for the national line by the government and World-Bank definitions match those in Ministry of Planning (2013 and 2014) and World Bank (2014).

[17] It is not clear why "other urban" poverty rose (regardless of definition) in 2009/11.

2.4 Poverty lines

The scorecard is constructed using 100% of the World-Bank-definition national poverty line. Because local, pro-poor programs in Cambodia may want to use different or various poverty lines (and different or various definitions of *poverty*), this paper calibrates scores from its single scorecard to poverty likelihoods for five old-definition lines, eight government-definition lines, and eight World-Bank-definition lines:

- Old-definition lines:
    — 100% of national
    — 150% of national
    — 200% of national
    — $1.25/day 2005 PPP
    — $2.50/day 2005 PPP
- Government-definition lines:
    — 100% of national
    — 150% of national
    — 200% of national
    — Median
    — $1.25/day 2005 PPP
    — $2.00/day 2005 PPP
    — $2.50/day 2005 PPP
    — $5.00/day 2005 PPP
- World-Bank-definition lines:
    — 100% of national
    — 150% of national
    — 200% of national
    — Median
    — $1.25/day 2005 PPP
    — $2.00/day 2005 PPP
    — $2.50/day 2005 PPP
    — $5.00/day 2005 PPP

The values of lines with the same name (such as "100% of the national line" or the "$1.25/day 2005 PPP line") vary by the definition of *poverty*. For example, 100% of the old-definition national line in 2009 is KHR3,328, which differs from the KHR4,081

for 100% of the World-Bank-definition national line and the KHR3,863 for 100% of the government definition (Figure 1).

For a given definition of *poverty* and a given survey year, the median poverty line is defined as the median per-capita consumption of people (not households) who are below 100% of the national line (Schreiner, 2014; United States Congress, 2004). For a given round of the CSES and a given definition of *poverty*, the median line differs for each of Cambodia's three poverty-line regions.

For a given definition of *poverty* and a given round of the CSES, the $1.25/day 2005 PPP poverty line is derived from:

- 2005 PPP exchange rate of KHR1,615.30 per $1.00 (World Bank, 2008)
- Annual average Consumer Price Index (base January 2003 = 104.51) for Cambodia:[18]
    — 2004: 108.90
    — 2005: 115.20
    — 2009: 156.02
    — 2011: 171.16
    — 2012: 176.07
- Average all-Cambodia national line (Figure 1)
- The value of 100% of the national line in each of the three poverty-line regions (Figure 1)

---

[18] The CPI used here splices several series with different bases to a common base. The original CPIs were retrieved on 28 April 2014 from
`nis.gov.kh/nis/CPI/mcpiPP_2003.htm` (2003),
`nis.gov.kh/nis/CPI/mcpiPP_2004.htm` (2004),
`nis.gov.kh/nis/CPI/mcpiPP_2005.htm` (2005),
`nis.gov.kh/nis/CPI/mcpiPP_2006.htm` (2006),
`nis.gov.kh/nis/CPI/mcpiPP_2007.htm` (2007),
`nis.gov.kh/Backup121313/nis/CPI/Jan.html` and other similar monthly reports (2008 and 2009), and `nis.gov.kh/Backup121313/nis/CPI/Jan10.html` and other similar monthly reports (2010 to 2012).

Based on Sillers (2006), the all-Cambodia \$1.25/day 2005 PPP line for all definitions of *poverty* in a given year (for example, 2011) is:

$$\left(2005 \text{ PPP exchange rate}\right) \cdot \$1.25 \cdot \left(\frac{\text{CPI}_{2011}}{\text{CPI}_{2005}}\right) =$$
$$\left(\frac{\text{KHR}1{,}615.30}{\$1.00}\right) \cdot \$1.25 \cdot \left(\frac{171.16}{115.20}\right) = \text{KHR}3{,}000.$$

This line applies to Cambodia on average and for all definitions of *poverty*. In a given poverty-line region for a given definition of *poverty* and a given year, the regional \$1.25/day line is the all-Cambodia \$1.25/day line, multiplied by the value of 100% of the national line in that poverty-line region, and then divided by Cambodia's average national line.

For the example of the Phnom Phen poverty-line region in 2011 with the World-Bank definition, the all-Cambodia \$1.25/day line is KHR3,000 (Figure 1). This is multiplied by the value of 100% of the World-Bank-definition national line in Phnom Phen (KHR6,014) and then divided by the average World-Bank-definition national line (KHR4,637). This gives a World-Bank-definition \$1.25/day 2005 PPP poverty line for Phnom Phen in 2011 of 3,000 x 6,014 ÷ 4,637 = KHR3,891 (Figure 1).

For Cambodia overall, the person-level poverty rate for the World-Bank-definition \$1.25/day 2005 PPP poverty line in 2011 is 3.2 percent (Figure 1). This is much lower than the 10.1 percent reported for 2011 by the World Bank's PovcalNet.[19] The reason of the discrepancy is unknown, and the discrepancy is similar for all

---

[19] `iresearch.worldbank.org/PovcalNet/index.htm`, retrieved 20 December 2014

definitions of *poverty* (including the World-Bank definition). PovcalNet does not report how it did its calculation, so the estimates here are to be preferred (Schreiner, 2014).

2.5   The USAID "very poor" poverty line

USAID microenterprise partners in Cambodia who use the scorecard to report poverty rates to USAID should use the World-Bank-definition median poverty line. This is because USAID defines the "very poor" as those people in households whose per-capita consumption is below the highest of two World-Bank-definition poverty lines in 2011 (Figure 1):[20]

- World-Bank-definition $1.25/day 2005 PPP (KHR3,000)
- World-Bank-definition median line (KHR3,825)

2.6   "Parallel-lines" assumption

If the "parallel-lines" assumption holds, then it is valid to splice together two estimates of change over time in which the follow-up estimate of change is a non-hybrid (using government- or World-Bank-definition poverty lines and both a baseline and a follow-up from the new 2011 scorecard) and in which the baseline estimate of change is a hybrid (using old-definition poverty lines with a baseline from the old 2004 scorecard and a follow-up from the new 2011 scorecard).

---

[20] 2011 is relevant because it is the most recent year with World-Bank-definition lines. The World-Bank-definition lines are relevant because—vis-à-vis government-definition lines—they align better with common international practice.

The "parallel lines" assumption is that *changes* in poverty rates over time are the same regardless of the definition of *poverty*, even though the *levels* of the estimates at a point in time may differ by the definition of *poverty*.

For Cambodia, the "parallel lines" assumption can be checked; based on published person-level poverty rates for the national line (Knowles, 2012 and 2006a; Ministry of Planning, 2014 and 2013; and World Bank, 2014)[21], the annual average decrease is about 4.0 percentage points for the old definition (2004 to 2009), 5.6 percentage points for the government definition (2004 to 2012), and 4.7 percentage points for the World-Bank definition (2004 to 2011).[22]

Thus, the "parallel-lines" assumption does not hold perfectly, but it holds better with the World-Bank definition than with the government definition. This is another reason to use the World-Bank definition with the new 2011 scorecard from now on.

---

[21] These published rates match those in Figure 1 for 2004, 2009, 2011, and 2012.

[22] The household-level data in Figure 1 is sparser, but the results are similar. In particular, the average annual decrease is about 3.7 percentage points for the old definition (2004 to 2009), 1.3 percentage points for the government definition (2009 to 2012), and 4.4 percentage points for the World-Bank definition (2004 to 2011).

3. Scorecard construction

For Cambodia, about 100 candidate indicators are initially prepared in the areas

of:

- Household composition (such as the number of members)
- Education (such as the literacy of the female head/spouse)
- Housing (such as the type of walls or roof)
- Ownership of durable assets (such as wardrobes or cabinets)
- Employment (such as the number of household members who work)

Figure 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.[23]

One possible application of the scorecard is to measure *changes* in poverty

through time. Thus, when selecting indicators and holding other considerations

constant, preference is given to more sensitive indicators. For example, the ownership of

a wardrobe or cabinet is probably more likely to change in response to changes in

poverty than is the age of the male head/spouse.

The scorecard itself is built using 100% of the World-Bank-definition national

poverty line and Logit regression on the 2011 construction sub-sample. Indicator

selection uses both judgment and statistics. The first step is to use Logit to build one

scorecard for each candidate indicator. Each scorecard's power to rank households by

poverty status is measured as "c" (SAS Institute Inc., 2004).

---

[23] The uncertainty coefficient is not used as a criterion when selecting scorecard
indicators; it is just a way to order the candidate indicators in Figure 2.

One of these one-indicator scorecards is then selected based on several factors (Schreiner *et al.*, 2004; 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 poverty, variety among indicators, applicability across regions, tendency to have a slowly-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 round. The best two-indicator scorecard is then selected, again using judgment to balance "c" with the non-statistical criteria. These steps are repeated until the scorecard has 10 indicators that work well together.[24]

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[25] and non-statistical criteria. The non-statistical criteria can improve

---

[24] The selection of the final 10 indicators was also informed by feedback from future users of the updated scorecard via desk-based review and field testing.
[25] 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.

robustness through time and help ensure that indicators are simple, sensible, and acceptable to users.

The single scorecard here applies to all of Cambodia. Tests for 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) suggest that segmenting scorecards by urban/rural does not improve targeting accuracy much. In general, segmentation may improve the accuracy of estimates of poverty rates (Diamond *et al.*, 2014; Tarozzi and Deaton, 2007), but segmentation may also increase the risk of overfitting (Haslett, 2012).

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 (Schreiner, 2005b). When scoring 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 scoring 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 scorecard here 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 simplicity, ease-of-use, and "face validity". Programs are more likely to collect data, compute scores, and pay attention to the results if, in their view, scoring does not imply a lot of additional work and if the whole process generally seems to them to make sense.

To this end, Cambodia's scorecard fits on one page. The construction process, indicators, and points are simple 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)

A field worker using Cambodia's paper scorecard would:

- Record the names and identifiers of the participant, of the field worker, and of the relevant organizational service point
- Record the date that the participant first participated with the organization
- Record the date of the scorecard interview
- Complete the back-page worksheet with each household member's:
  — First name
  — Age
  — Work status
- Record household size in the scorecard header, and record the responses to the first two scorecard indicators based on the back-page worksheet
- Read each of the remaining eight questions one-by-one from the scorecard, drawing a circle around the relevant responses and their points, and writing each point value in the far right-hand column
- Add up the points to get a total score
- Implement targeting policy (if any)
- 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. If organizations or field workers gather their own data and believe that they have an incentive to exaggerate poverty rates (for example, if 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).[26] IRIS Center (2007a) and Toohig

(2008) are useful nuts-and-bolts guides for budgeting, training field workers and

supervisors, logistics, sampling, interviewing, piloting, recording data, and controlling

quality.

In particular, while collecting scorecard indicators is relatively easier than

alternative ways of measuring poverty, it is still absolutely difficult. Training and

explicit definitions of terms and concepts in the scorecard are essential, and field

workers should scrupulously study and follow the "Guidelines for the Interpretation of

Scorecard Indicators" found at the end of this paper, as the "Guidelines"—along with

the "Back-page Worksheet"—are an integral parts of the Simple Poverty Scorecard

tool.[27]

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 simple as whether the household owns an automobile. At the same time,

Grosh and Baker (1995) suggest that gross underreporting of assets does not affect

---

[26] If a program does not want field workers to know the points associated with responses, then it can use a version of the scorecard that does not display the points and then apply the points and compute scores later at a central office. 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. Even if points are hidden, field workers and respondents can apply common sense to guess how response options are linked with poverty.

[27] 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 Cambodia's NIS does in the CSES.

targeting. For the first stage of targeting in a conditional cash-transfer program in Mexico, Martinelli and Parker (2007, pp. 24–25) find that "underreporting [of asset ownership] is widespread but not overwhelming, except for a few goods . . . [and] overreporting is common for a few goods, which implies that self-reporting may lead to the exclusion of deserving households". 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 workers who make a home visit. This is the recommended procedure for local, pro-poor organizations who use scoring for targeting in Cambodia.

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

- Who will do the scoring
- How scores will be recorded
- What participants will be scored
- How many participants will be scored
- How frequently participants will be scored
- Whether scoring will be applied at more than one point in time
- Whether the same 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 goal should be to make sure that the sample is representative of a well-defined population and that the scorecard will inform an issue that matters to the organization.

The non-specialists who apply the scorecard with participants in the field can be:

- Employees of the organization
- Third parties

Responses, scores, and poverty likelihoods can be recorded 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

Given a population of participants relevant for a particular business question, the participants to be scored can be:

- All relevant participants (a census)
- A representative sample of relevant participants
- All relevant participants in a representative sample of relevant field offices
- A representative sample of relevant participants in a representative sample of relevant field offices

If not determined by other factors, the number of participants to be scored can be derived from sample-size formulas (presented later) to achieve a desired confidence level and a desired confidence interval. The focus, however, should not be on having a sample size large enough to achieve some arbitrary level of statistical significance but rather to get a representative sample from a well-defined population so that the analysis of the results can have a chance to meaningfully inform questions that matter to the organization.

The frequency of application can be:

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

When a scorecard is applied more than once in order to measure change in poverty rates, 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 a Simple Poverty Scorecard tool for Bangladesh (Schreiner, 2013) with a sample of about 25,000. Their design is that all loan officers in a random sample of branches score all participants each time they visit a homestead (about once a year) as part of their standard due diligence prior to loan disbursement. They 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 household poverty likelihoods

The sum of scorecard points for a household is called the *score*. For Cambodia, 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 must be converted to *poverty likelihoods*, that is, probabilities of being below a poverty line. This is done via simple look-up tables. For the example of 100% of the World-Bank-definition national line, scores of 25–29 have a poverty likelihood of 46.6 percent, and scores of 30–34 have a poverty likelihood of 34.3 percent (Figure 3).

The poverty likelihood associated with a score varies by poverty line. For example, scores of 25–29 are associated with a poverty likelihood of 46.6 percent for 100% of the World-Bank-definition national line but of 7.5 percent for the World-Bank-definition $1.25/day 2005 PPP line.[28]

---

[28] Starting with Figure 3, many figures have 21 versions, one for each of the eight World-Bank-definition lines, five old-definition lines, and eight government-definition lines. To keep them straight, they are grouped by the definition of *poverty* and by the poverty line. Single figures pertaining to all lines for a given definition of *poverty* are placed with the figures for 100% of the World-Bank-definition national line.

5.1 Calibrating scores with poverty likelihoods

A given score is associated ("calibrated") with a poverty likelihood by defining the poverty likelihood as the share of households in the calibration sub-sample who have the score and who have per-capita consumption below a given poverty line.

For the example of 100% of the World-Bank-definition national line (Figure 4), there are 7,867 (normalized) households in the 2011 calibration sub-sample with a score of 25–29. Of these, 3,664 (normalized) are below the poverty line. The estimated poverty likelihood associated with a score of 25–29 is then 46.6 percent, because 3,664 ÷ 7,867 = 46.6 percent.

To illustrate with 100% of the World-Bank-definition national line and a score of 30–35, there are 9,120 (normalized) households in the 2011 calibration sample, of whom 3,129 (normalized) are below the line (Figure 4). The poverty likelihood for this score range is then 3,129 ÷ 9,120 = 34.3 percent.

The same method is used to calibrate scores with estimated poverty likelihoods for the other 20 poverty lines.[29]

Figure 5 shows—for all scores and separately for the three definitions of *poverty*—the likelihood that a given household's per-capita consumption falls in a range demarcated by two adjacent poverty lines.

---

[29] To ensure that poverty likelihoods never increase as scores increase, likelihoods across series of adjacent scores are sometimes 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.

As an example with World-Bank-definition lines, the probability that a household with a score of 25–29 falls between two adjacent poverty lines is:

- 7.5 percent   below \$1.25/day 2005 PPP
- 15.7 percent   between \$1.25/day and the median line
- 23.3 percent   between the median line and 100% of the national line
- 5.9 percent   between 100% of the national line and \$2.00/day
- 26.9 percent   between \$2.00/day and \$2.50/day
- 13.8 percent   between \$2.50/day and 150% of the national line
- 4.3 percent   between 150% and 200% of the national line
- 1.9 percent   between 200% of the national line and \$5.00/day
- 0.5 percent   above \$5.00/day 2005 PPP

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 quantitative poverty lines and from survey data on consumption. The calibrated poverty likelihoods would be objective even if the process 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.*, 2004). 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 this objectivity depends on using data in score calibration, not on using data (and nothing else) in scorecard construction.

Although the points in the Cambodia scorecard are transformed coefficients from a Logit regression, (untransformed) scores are not converted to poverty likelihoods via the Logit formula of 2.718281828^{score} x $(1 + 2.718281828^{score})^{-1}$. This is because the Logit formula is esoteric and difficult to compute by hand. Non-specialists find it 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 households that are representative of the same population 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 true value. Given the assumptions above, the scorecard also produces unbiased estimates of poverty rates at a point in time and unbiased estimates of changes in poverty rates between two points in time.[30]

---

[30] This follows because these estimates of groups' poverty rates are linear functions of the unbiased estimates of households' poverty likelihoods.

37

Of course, the relationships between indicators and poverty do change to some unknown extent over time and also across sub-national groups in Cambodia's population. Thus, the scorecard will generally be biased when applied after December 2011 (the last month of fieldwork for the 2011 CSES) or when applied with sub-groups that are not nationally representative.

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 Cambodia as a whole? To find out, the scorecard is applied to 1,000 bootstrap samples of size $n = 16{,}384$ from the 2011 validation sample for the government- and World-Bank-definition lines and also separately to 1,000 bootstrap samples of size $n = 16{,}384$ from the 2009 validation sample for old-definition lines. Bootstrapping means to:

- Score each household in a given validation sample
- Draw a bootstrap sample *with replacement* from the validation sample
- For each score, compute the true 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, record the difference between the estimated poverty likelihood (Figure 3) and the true poverty likelihood in the bootstrap sample
- Repeat the previous three steps 1,000 times
- For each score, report the average difference between estimated and true poverty likelihoods across the 1,000 bootstrap samples
- For each score, report the two-sided intervals containing the central 900, 950, and 990 differences between estimated and true poverty likelihoods

For each score range and for $n = 16{,}384$, Figure 6 shows the average difference between estimated and true poverty likelihoods as well as confidence intervals for the differences.

For the example of 100% of the World-Bank-definition national line, the average poverty likelihood across bootstrap samples for scores of 25–29 in the 2011 validation sample is too high by 6.5 percentage points. For scores of 30–34, the estimate is too high by 7.3 percentage points.[31]

The 90-percent confidence interval for the differences for scores of 25–29 is ±2.2 percentage points (100% of the World-Bank-definition national line, Figure 6). This means that in 900 of 1,000 bootstraps, the difference between the estimate and the true value is between +4.3 and +8.7 percentage points (because +6.5 − 2.2 = +4.3, and +6.5 + 2.2 = +8.7). In 950 of 1,000 bootstraps (95 percent), the difference is +6.5 ± 2.8 percentage points, and in 990 of 1,000 bootstraps (99 percent), the difference is +6.5 ± 3.7 percentage points.

Some differences between estimated poverty likelihoods and true values in Figure 6 are large. There are differences because the validation sample is a single sample that—thanks to sampling variation—differs in distribution from the construction/calibration sub-samples and from Cambodia's population.[32] For targeting, however, what matters is less the difference in all score ranges and more the differences in the score ranges just above and below the targeting cut-off. This mitigates the effects

---

[31] These differences are not zero, despite the estimator's unbiasedness, because the scorecard comes from a single CSES sample. The average difference by score range would be zero if the CSES was repeatedly applied to samples of the population of Cambodia and then split into sub-samples before repeating the entire process of scorecard construction/calibration and validation.

[32] Also, sample sizes are not particularly large in the 2011 and 2012 CSES.

of bias and sampling variation on targeting (Friedman, 1997). Section 8 below looks at targeting accuracy in detail.

In addition, if estimates of groups' 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.

Another possible source of differences between estimates and true values is overfitting. The scorecard here is unbiased, but it may still be *overfit* when applied after the end of the CSES fieldwork in December 2011.[33] That is, it may fit the data from the 2011 CSES so closely that it captures not only some real patterns but also some random patterns that, due to sampling variation, show up only in the 2011 CSES but not in the overall population of Cambodia. 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 samples 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.

---

[33] For old-definition lines, the scorecard may be overfit if the relationships between indicators and poverty have changed since the end of fieldwork for the 2009 CSES.

Most errors in individual households' likelihoods do balance out in the estimates of groups' poverty rates for nationally representative samples (see the next section). Furthermore, at least some of the differences in change-through-time estimates may 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 cost-of-living 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 group's poverty rate at a point in time

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

To illustrate, suppose an organization samples three households on 1 January 2015 and that they have scores of 20, 30, and 40, corresponding to poverty likelihoods of 60.7, 34.3, and 10.5 percent (100% of the World-Bank-definition national line, Figure 3). The group's estimated poverty rate is the households' average poverty likelihood of $(60.7 + 34.3 + 10.5) \div 3 = 35.2$ percent.

Be careful; the group's poverty rate is *not* the poverty likelihood associated with the average score. Here, the average score is 30, which corresponds to a poverty likelihood of 34.3 percent. This differs from the 35.2 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 targeting. The safest rule to follow is: Always use poverty likelihoods, never scores.

Scores from the new 2011 scorecard are calibrated—with data from the 2009 CSES—to the old-definition poverty lines that were used with Cambodia's old 2004 scorecard (Schreiner, 2009a). Scores from the new 2011 scorecard are also calibrated—

with data from the 2011 CSES—to the World-Bank-definition and government-definition lines. The process of calibrating scores to poverty likelihoods and the approach to estimating poverty rates is exactly the same for all lines, regardless of their definition. For users, the only difference is in the specific look-up table used to convert scores to poverty likelihoods.

Existing users of the old 2004 scorecard who switch to the new 2011 scorecard and who want to salvage existing poverty-rate estimates for measuring change over time can use the old-definition lines to estimate poverty rates for use in hybrid estimates of changes with a baseline from the old 2004 scorecard and a follow-up from the new 2011 scorecard. From now on, all users of the new 2011 scorecard should also estimate poverty rates using the World-Bank-definition lines (and perhaps also with the government-definition lines). The appendix describes the process of splicing together hybrid estimates of change looking backwards and non-hybrid estimates of change going forward, as well as the assumptions required for such estimates to be valid.

6.1 Accuracy of estimated poverty rates at a point in time

For the new 2011 Cambodia scorecard applied to 1,000 bootstraps of $n = 16,384$ from the 2011 validation sample and 100% of the World-Bank-definition national line, the average difference between the estimated poverty rate at a point in time versus the true rate is +1.1 percentage points (Figure 8, summarizing Figure 7 across all poverty lines associated with a given definition of *poverty*). Across all eight World-Bank-

43

definition poverty lines in the 2011 validation sample, the maximum absolute difference is 1.7 percentage points, and the average absolute difference is about 0.9 percentage points. At least part of these differences is due to sampling variation in the division of the 2011 CSES into two sub-samples.

When estimating poverty rates at a point in time, the bias reported in Figure 8 should be subtracted from the average poverty likelihood to make the estimate unbiased. For the example of Cambodia's new 2011 scorecard and 100% of the World-Bank-definition national line in the 2011 validation sample, bias is +1.1 percentage points, so the unbiased estimate in the three-household example above is 35.2 − (+1.1) = 34.1 percent.

For old-definition lines, the maximum absolute difference in the 2009 validation sample is 0.7 percentage points, and the average absolute difference is about 0.4 percentage points (Figure 8). For the government-definition lines, the corresponding figures in the 2011 validation sample are 2.9 and 1.4 percentage points.

In terms of precision, the 90-percent confidence interval for a group's estimated poverty rate at a point in time with $n = 16{,}384$ is ± 0.6 percentage points or better for all lines across all three definitions of *poverty* (Figure 8). This means that in 900 of 1,000 bootstraps of this size, the estimate (after subtracting off bias) is within 0.6 percentage points of the true value.

For example, suppose that the average poverty likelihood in a sample of $n = 16{,}384$ with the Cambodia scorecard and 100% of the World-Bank-definition national

line is 35.2 percent. Then estimates in 90 percent of such samples would be expected to fall in the range of 35.2 − (+1.1) − 0.4 = 33.7 percent to 35.2 − (+1.1) + 0.4 = 34.5 percent, with the most likely true value being the unbiased estimate in the middle of this range, that is, 35.2 − (+1.1) = 34.1 percent. This is because the original (biased) estimate is 35.2 percent, bias is +1.1 percentage points, and the 90-percent confidence interval for 100% of the World-Bank-definition national line in the 2011 validation sample with this sample size is ±0.4 percentage points (Figure 8).

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 average difference vis-à-vis true values (*bias*), together with their standard error (*precision*).

Schreiner (2008a) proposes an approach to deriving a formula for the standard errors of estimated poverty rates at a point in time from indirect measurement via scorecards. 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 direct measurement of ratios, where:

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

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

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

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

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

N is the population size, and

n is the sample size.

For example, Cambodia's 2011 CSES gives a direct-measurement estimate of the household-level poverty rate for 100% of the World-Bank-definition national line in the 2011 validation sample of $\hat{p} = 16.5$ percent (Figure 1). If this estimate came from a sample of $n = 16,384$ households from a population N of 3,207,363 (the number of households in Cambodia in 2011 according to the World-Bank-definition sampling

weights), then the finite population correction ϕ is $\sqrt{\dfrac{3{,}207{,}363 - 16{,}384}{3{,}207{,}363 - 1}} = 0.9974$, which

very close to $\phi = 1$. If the desired confidence level is 90-percent ($z = 1.64$), then the

confidence interval $\pm c$ is

$$\pm z \cdot \sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}} = \pm 1.64 \cdot \sqrt{\frac{0.165 \cdot (1 - 0.165)}{16{,}384}} \cdot \sqrt{\frac{3{,}207{,}363 - 16{,}384}{3{,}207{,}363 - 1}} = \pm 0.474$$

percentage points. (If ϕ were taken as 1, then the interval is ± 0.476 percentage points.)

The scorecard, however, does not measure poverty directly, so this formula is not

applicable. To derive a formula for the Cambodia scorecard, consider Figure 7, which

reports empirical confidence intervals $\pm c$ for the differences for the scorecard applied to

1,000 bootstraps of various sizes from the 2011 validation sample (government- and

World-Bank-definition lines) and from the 2009 validation sample (old-definition lines).

For example, with $n = 16{,}384$ and 100% of the World-Bank-definition national line in

the 2011 validation sample, the 90-percent confidence interval is ± 0.426 percentage

points.[34]

Thus, the 90-percent confidence interval with $n = 16{,}384$ is ± 0.426 percentage

points for the Cambodia scorecard and ± 0.474 percentage points for direct

measurement. The ratio of the two intervals is $0.426 \div 0.474 = 0.90$.

---

[34] Due to rounding, Figure 7 displays 0.4, not 0.426.

Now consider the same exercise, but with $n = 8{,}192$. The confidence interval

under direct measurement and 100% of the World-Bank-definition national line in the

2011 validation sample is $\pm 1.64 \cdot \sqrt{\dfrac{0.165 \cdot (1 - 0.165)}{8{,}192}} \cdot \sqrt{\dfrac{3{,}207{,}363 - 8{,}192}{3{,}207{,}363 - 1}} = \pm 0.672$

percentage points. The empirical confidence interval with the Cambodia scorecard

(Figure 7) is ± 0.575 percentage points. Thus for $n = 8{,}192$, the ratio of the two

intervals is $0.575 \div 0.672 = 0.86$.

This ratio of 0.86 for $n = 8{,}192$ is close to the ratio of 0.90 for $n = 16{,}384$. Across

all sample sizes of 256 or more in Figure 7, these ratios are generally close to each

other, and the average ratio in the 2011 validation sample turns out to be 0.89,

implying that confidence intervals for indirect estimates of poverty rates via the

Cambodia scorecard and 100% of the World-Bank-definition national poverty line are—

for a given sample size—about 11-percent narrower than confidence intervals for direct

estimates via the 2011 CSES. This 0.89 appears in Figure 8 as the "α factor" because if

$\alpha = 0.89$, then the formula for confidence intervals c for the Cambodia scorecard is

$\pm c = \pm z \cdot \alpha \cdot \sigma$. That is, the formula for the standard error σ for point-in-time estimates

of poverty rates via scoring is $\alpha \cdot \sqrt{\dfrac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\dfrac{N - n}{N - 1}}$.

In general, α can be more or less than 1.00. When α is less than 1.00, it means

that the scorecard is more precise than direct measurement. Across the three definitions

of *poverty* (2011 validation sample for government and World-Bank definitions, and

2009 validation sample for old definition) α is less than 1.00 in 18 of 21 cases in Figure 8.

The formula relating confidence intervals with standard errors for the scorecard can be rearranged to give a formula for determining sample size before measurement. If $\widetilde{p}$ is the expected poverty rate before measurement, 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

$$n = N \cdot \left(\frac{z^2 \cdot \alpha^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p})}{z^2 \cdot \alpha^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p}) + c^2 \cdot (N - 1)} \right)$$. If the population N is "large" relative to the sample size n, then the finite population correction factor ϕ can be taken as one (1),

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

To illustrate how to use this, suppose the population N is 3,207,363 (the number of households in Cambodia in 2011 according to the World-Bank-definition sample weights), suppose $c = 0.03319$, $z = 1.64$ (90-percent confidence), and the relevant poverty line is 100% of the World-Bank-definition national line so that the most sensible expected poverty rate $\widetilde{p}$ is Cambodia's overall poverty rate for that line in 2011 (16.4 percent at the household level, Figure 1). The α factor is 0.89 (Figure 8). Then the sample-size formula gives

$$n = 3{,}207{,}363 \cdot \left(\frac{1.64^2 \cdot 0.89^2 \cdot 0.164 \cdot (1 - 0.164)}{1.64^2 \cdot 0.89^2 \cdot 0.164 \cdot (1 - 0.164) + 0.03319^2 \cdot (3{,}207{,}363 - 1)} \right) = 266, \text{ which}$$

is close to the sample size of 256 observed for these parameters in Figure 7 for 100% of

the World-Bank-definition national line. Taking the finite population correction factor

ϕ as one (1) gives the same result, as $n = \left(\dfrac{0.89 \cdot 1.64}{0.03319}\right)^2 \cdot 0.164 \cdot (1 - 0.164) = 266.$[35]

Of course, the α factors in Figure 8 are specific to Cambodia, its poverty lines, its poverty rates, and its scorecard. The derivation of the formulas for standard errors using the α factors, however, is valid for any scorecard following the approach in this paper.

In practice after the end of fieldwork for the CSES in December 2011, a program would select a poverty line (say, 100% of the World-Bank-definition 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, ± 2.0 percentage points, or $c = \pm 0.02$), make an assumption about $\tilde{p}$ (perhaps based on a previous measurement such as the household-level poverty rate for 100% of the World-Bank-definition national line for Cambodia of 16.4 percent in the 2011 CSES in Figure 1), look up α (here, 0.89 in Figure 8), assume that the scorecard will still work in

---

[35] 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 microenterprise partners in Cambodia should report using the World-Bank-definition median line. Given the α factor of 0.98 for this line in 2011 (Figure 8), an expected before-measurement household-level poverty rate of 7.8 percent (the all-Cambodia rate in 2011, Figure 1), and a confidence level of 90 percent, then $n = 300$ implies a confidence interval of $\pm 1.64 \cdot 0.98 \cdot \sqrt{\dfrac{0.078 \cdot (1 - 0.078)}{300}} = \pm 2.5$ percentage points.

the future and for sub-groups that are not nationally representative,[36] and then compute

the required sample size. In this illustration,

$$n = 10{,}000 \cdot \left(\frac{1.64^2 \cdot 0.89^2 \cdot 0.164 \cdot (1 - 0.164)}{1.64^2 \cdot 0.89^2 \cdot 0.164 \cdot (1 - 0.164) + 0.02^2 \cdot (10{,}000 - 1)} \right) = 681.$$

---

[36] This paper reports accuracy for the scorecard applied to its various validation samples, but it cannot test accuracy for later years or for sub-groups. Performance after December 2011 will resemble that in the 2011 CSES with deterioration over time 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 group's poverty rate between two points in time is estimated as the change in the average poverty likelihood of the households in the group.

This section discusses non-hybrid estimates of change in which both the baseline and follow-up use the new 2011 scorecard with same poverty line under the same definition of *poverty*.

Because the new 2011 scorecard is calibrated both to old-definition lines and to the new government-definition and World-Bank-definition lines, existing users of the old 2004 scorecard, after switching to the new 2011 scorecard, can still find hybrid estimates of change in poverty rates over time for old-definition lines with a baseline from the old 2004 scorecard and a follow-up from the new 2011 scorecard. The appendix (not this section) explains the step-by-step mechanics of that calculation.

To give an idea of how accurate the new 2011 Cambodia scorecard might be when used to measure changes in poverty rates over time from now on, this section looks at how accurate the scorecard would have been, had it been applied between two existing CSES rounds:

- 2004 and 2009 (World-Bank-definition lines)
- 2009 and 2011 (World-Bank-definition lines)
- 2004 and 2009 (old-definition lines)
- 2009 and 2011 (government-definition lines)
- 2011 and 2012 (government-definition lines)

The tests here are stringent because:

- They compare scorecard estimates with known, true values from the CSES
- Poverty rates in Cambodia fell steeply from 2004 to 2009, and while they also fell from 2009 to 2012, the decrease was less rapid. The long time period and the large change in poverty increase the risk of inaccuracy due to changing relationships between indicators and poverty
- While the 2004 and 2009 CSES have large samples (almost 12,000 households each), the 2011 and 2012 CSES have smaller samples (less than 4,000 households each), increasing the risk of inaccuracy due to sampling variation
- The tests are fully *out-of-sample* in that they use only CSES data that is not also used in construction or calibration
- The tests are *out-of-time* in that the baseline and/or follow-up is from a year other than 2011 (or, for the old definition, 2009), the year of the data used for construction and/or calibration

Of course, these backward-looking tests—the only ones possible for estimates of changes in poverty rates—can only give a rough idea of how accurate the scorecard might be when used in practice from now on. After all, the factors that affected accuracy in the past probably differ in type and degree from the factors that will matter for accuracy in the future. This is the unfortunate-but-inevitable nature of scorecards.

Because items in the CSES are virtually identical in the 2009, 2011, and 2012 rounds, and because estimates from the scorecard are unbiased when applied to an unchanging population in which there are unchanging relationships between indicators and poverty, any large inaccuracies in estimates of change over time for tests using pairs of years from these three CSES rounds must be due mostly to sampling variation or due to changes in the relationships between indicators and poverty.

Items in the scorecard are not always identical between the 2004 CSES and later rounds. These differences may explain a little or a lot of the differences observed

between estimates and true values for measures of change over time that involve the

2004 round. In particular, the 2004 CSES differs from later rounds in that:

- Indicator 2 (number of household members who work) gives fewer explicit examples of what is to be considered as *work*, reading "During the past 7 days, how many household members did any work at all, even one hour (worked on farm, private or public sector, own account, or in a business belonging to someone else in the household etc.)?"
- Indicator 5 (type of wall) does not appear at all; instead, there are two questions, one for inner walls, and one for outer walls. This paper assumes that the outer-walls question in 2004 corresponds to the plain "walls" question in 2009–2012, but that may not be correct. Also, response options were expanded after 2004 with the addition of grass and leaves, clay/dung with straw, other metal sheets, and asbestos
- Indicator 6 (type of roof) had its response options expanded after 2004 to include leaves and grass
- Indicator 8 (ownership of a television or video/VCD/DVD player/recorder) in 2004 had "video tape" instead of "video" and did not include "VCD/DVD"

These differences between scorecard indicators in the 2004 CSES versus later

rounds do not matter for the "identical items" assumption needed for the hybrid

approach to estimating change through time with two different scorecards; that

assumption depends only on the 2009 and 2011 CSES, where it holds perfectly. But

these differences explain some unknown part of inaccuracies (discussed below) in out-of-

sample/out-of-time tests for estimates of change over time between the 2004 CSES and

a later round.

7.1   Warning: Change is not impact

Scoring can estimate change. Of course, poverty could get better or worse, and

scoring does not indicate what caused change. This point is often forgotten or confused,

so it bears repeating: the scorecard simply estimates change, and it does not, in and of

itself, indicate the reason for the change. In particular, estimating the impact of participation requires knowing what would have happened to participants if they had not been participants. Knowing this requires either strong assumptions or a control group that resembles participants in all ways except participation. To belabor the point, the 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 information must come from beyond the scorecard.

7.2   Estimating changes in poverty rates over time

Consider the illustration begun in the previous section. On 1 January 2015, an organization samples three households who score 20, 30, and 40 and so have poverty likelihoods of 60.7, 34.3, and 10.5 percent (100% of the World-Bank-definition national line, Figure 3). Adjusting for the known bias in the 2011 validation sample of +1.1 percentage points (Figure 8), the group's baseline estimated poverty rate is the households' average poverty likelihood of $[(60.7 + 34.3 + 10.5) \div 3] - (+1.1) = 34.1$ percent.

After baseline, two sampling approaches are possible for the follow-up round:
- Score a new, independent sample, measuring change across samples
- Score the same sample at both baseline and follow-up

By way of illustration, suppose that two years later on 1 January 2017, the organization samples three additional households who are in the same population as the

three original households (or suppose that the same three original households are scored a second time) and finds that their scores are 25, 35, and 45 (poverty likelihoods of 46.6, 20.2, and 5.5 percent, 100% of the World-Bank-definition national line, Figure 3). Adjusting for the known bias, the average poverty likelihood at follow-up is [(46.6 + 20.2 + 5.5) ÷ 3] – (+1.1) = 23.0 percent, an improvement of 34.1 – 23.0 = 11.1 percentage points.[37]

Thus, about one in nine participants in this hypothetical example cross the poverty line in 2015/7.[38] Among those who start below the line, about one in three (11.1 ÷ 34.1 = 32.6 percent) on net end up above the line.[39]

7.3 Accuracy for estimated change in two independent samples

The accuracy of scoring's estimates of changes in poverty rates over time is checked using CSES data from 2004, 2009, 2011, and 2012. While one cannot "drive by looking in the rear-view mirror", historical accuracy is the best-available—but inevitably imperfect—indicator of future accuracy.

For the seven[40] World-Bank-definition lines, the average of the absolute ratio of bias to true change (the *relative bias*) is 37 percent (when tested from 2011 to 2004) and

---

[37] Of course, such a huge reduction in poverty in two years is highly unlikely, but this is just an example to show how the scorecard can be used to estimate change.

[38] This is a net figure; some start above the line and end below it, and vice versa.

[39] The scorecard does not reveal the reasons for this change.

[40] Changes in poverty rates for median lines are not meaningful because the median lines are not constant in real terms over time.

311 percent (when tested from 2011 to 2009, Figure 9). Bias is smaller for the longer time period, possibly because the true change is larger and because the larger sample sizes reduces sampling variation.

For the five old-definition lines from 2009 to 2004, the average relative bias is 55 percent (Figure 9). For the example of 100% of the old-definition national line, the true change is –18.0 percentage points, the estimated change is –29.8 percentage points, so bias is –29.8 – (–18.0) = –11.8 percentage points. In absolute-value terms, bias is |–11.8| ÷ |–18.0| = 66 percent of the true value.

For the seven government-definition lines, average relative absolute bias is 92 percent (when tested from 2011 to 2009) and 73 percent (when tested from 2011 to 2012, Figure 9).

Across all 33 combinations of poverty lines, definitions of poverty, and pairs of survey years, the average relative absolute bias is 117 percent, implying that the expected size of the error in an estimate is a little larger that the true value. This ratio is strongly influenced by a few cases with small true changes but large biases; the ratio of sum of the absolute biases across all 33 cases to the sum of the absolute true changes across all 33 cases is smaller (about 63 percent).

The scorecard's accuracy for the magnitude (size) of changes in poverty is disappointing. Nevertheless, scoring does get the direction (sign) of changes correct in

31 of 33 cases.[41] The estimate of the direction of change is statistically different from the opposite sign at the 90-percent level with $n = 1{,}024$ in 26 of the 33 cases, and the seven non-statistically different cases include the two where scoring has the sign wrong.

In sum, the Simple Pverty Scorecard® almost always estimates correctly whether poverty increased or decreased, but its bias in terms of the estimated magnitude of change is disappointing; on average, the ratio of the absolute size of bias to the absolute size of the true change is a little higher than 1.0. These errors are due to sampling variation (especially in short time periods and with the small sample sizes in the 2011 and 2012 CSES) and to changes in the relationships between indicators and poverty (especially in longer periods). The structure and design of the scorecard—at least in this case for Cambodia—does not mitigate these weaknesses well enough to provide an obviously acceptable level of accuracy.

7.4   Precision for estimates of change in two samples

Are scoring's estimates of change over time accurate enough? There is no objective standard for answering this question, as it depends on the context and the goal of the analysis. Perhaps the weakest benchmark is whether the estimates have the right sign. Here, scoring almost always gets the direction of change correct, and when it does not, its estimate is not statistically different from the opposite sign.

---

[41] This is non-trivial, as poverty increases in eight of 33 cases, all in shorter time periods (2009 to 2011, or 2011 to 2012). These reflect recent deteriorations among higher-consumption households, something not previously reported for Cambodia.

Beyond the sign and bias of estimated magnitudes, another dimension of accuracy that can be formally gauged is the standard statistical concept of *precision.* Figure 9 reports precision as confidence intervals (with $n = 16{,}384$ and 90-percent confidence) and more generally as the α factor used in formulas for standard errors.

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 σ of a scorecard'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,[42] and α is the average (across a range of bootstrapped sample sizes) of the ratio of the observed confidence interval from a scorecard and the theoretical confidence interval under direct measurement.

Given $n = 16{,}384$, the 90-percent confidence intervals for estimates of change over time are ± 0.8 percentage points or less (Figure 9, across all poverty lines and definitions of *poverty*). Seen another way, the α factor indicates that scoring's standard errors for World-Bank-definition lines are between 73 and 117 percent of the standard errors under direct measurement. For old-definition or government-definition lines,

---

[42] 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 measurements (not twice as many) as does estimating a poverty rate at a point in time.

scoring's standard errors are 77 to 101 percent of the standard errors under direct

measurement.

There can be no general, once-and-for-all answer as to whether the scorecard is

accurate enough to be useful for measuring change over time. The tests for Cambodia

here offer both hope and disappointment, as the scorecard almost always gets the

direction of change correct, but estimates of the magnitude of the change can be very

far off. Precision is close to that of direct measurement.

Is the scorecard better than feasible alternatives for measuring change over time?

This question is also difficult to answer. A central strength of scoring is that its

accuracy is known, but the accuracy of most alternatives is unknown or unreported.

As before, the formula for standard errors can be rearranged to give a formula or

sample sizes before indirect measurement via a scorecard, where $\widetilde{p}$ is based on previous

measurements and is assumed equal at both baseline and follow-up:

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

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

To illustrate the use of this formula to determine sample size for estimating

changes in poverty rates across two independent samples, suppose the desired

confidence level is 90 percent ($z = 1.64$), the desired confidence interval is ± 2

percentage points ($\pm c = \pm 0.02$), the poverty line is 100% of the World-Bank-definition

national line, $\alpha = 0.89$ (Figure 9),[43] $\hat{p} = 0.164$ (the household-level poverty rate in 2011

for 100% of the World-Bank-definition national line in Figure 1), and the population N

is large enough relative to the expected sample size n that the finite population

correction ϕ can be taken as one. Then the baseline sample size is

$$n = 2 \cdot \left(\frac{0.89 \cdot 1.64}{0.02}\right)^2 \cdot 0.164 \cdot (1 - 0.164) \cdot 1 = 1{,}461, \text{ and the follow-up sample size is}$$

also 1,461.

7.5   Precision for estimated change for one sample, scored twice

Analogous to previous derivations, the general formula relating the confidence

interval $\pm c$ to the standard error σ when using a scorecard to estimate change for a

single group of households, all of whom are scored at two points in time, is:[44]

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

where z, c, α, 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.

---

[43] For 100% of the World-Bank-definition national line, Figure 9 reports two values of α, one between 2011 and 2004 (0.75) and one between 2011 and 2009 (0.89). To be conservative, the larger figure is used here.
[44] See McNemar (1947) and Johnson (2007). John Pezzullo helped find this formula.

Because the CSES data for Cambodia does not cover the same households in more than one round (except by pure chance, and even then, there is no way to identify such households), it is not possible to estimate values of α here.

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

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

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

$$\tilde{p}_* = -0.02 + 0.016 \cdot y + 0.47 \cdot \left[p_{\text{pre-baseline}} \cdot \left(1 - p_{\text{pre-baseline}} \right) \right].$$

Given this, a sample-size formula for a group of households to whom the Cambodia scorecard is applied twice (once after December 2011 and then again later) is

$$n = 2 \cdot \left(\frac{\alpha \cdot z}{c} \right)^2 \cdot \left\{ \left[-0.02 + 0.016 \cdot y + 0.47 \cdot \left[p_{\text{pre-baseline}} \cdot \left(1 - p_{\text{pre-baseline}} \right) \right] \right] \right\} \cdot \sqrt{\frac{N - n}{n - 1}}.$$

In Peru (the only source of a data-based estimate, Schreiner, 2009e), the average α across years and poverty lines is about 1.30.

To illustrate the use of this formula, suppose the desired confidence level is 90 percent ($z = 1.64$), the desired confidence interval is ± 2.0 percentage points ($\pm c$ $= \pm 0.02$), the poverty line is 100% of the World-Bank-definition national line, the sample will first be scored in 2015 and then again in 2018 ($y = 3$), and the population N is so large relative to the expected sample size n that the finite population correction ϕ can be taken as one. The pre-baseline poverty rate p_{2015} is taken as 16.4 percent (Figure 1), and α is assumed to be 1.30. Then the baseline sample size is

$$n = 2 \cdot \left(\frac{1.30 \cdot 1.64}{0.02} \right)^2 \cdot \{-0.02 + 0.016 \cdot 3 + 0.47 \cdot [0.164 \cdot (1 - 0.164)]\} \cdot 1 \ = 2{,}101. \text{ The}$$

same group of 2,101 households is scored at follow-up as well.

8. Targeting

When an organization uses the scorecard for segmenting clients for targeted

services, households with scores at or below a cut-off are labeled *targeted* and treated—

for program purposes—as if they are below a given poverty line. Households with scores

above a cut-off are labeled *non-targeted* and treated—for program purposes—as if they

are above a given poverty line.

There is a distinction between *targeting status* (scoring 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 an organization's policy choice

that depends on a cut-off and on an indirect estimate from a scorecard.

Targeting is successful when households truly below a poverty line are targeted

(*inclusion*) and when households truly above a poverty line are not targeted (*exclusion*).

Of course, no scorecard is perfect, and targeting is unsuccessful when households truly

below a poverty line are not targeted (*undercoverage*) or when households truly above a

poverty line are targeted (*leakage*).

Figure 10 depicts these four possible targeting outcomes. Targeting accuracy

varies by the cut-off score; a higher cut-off has better inclusion (but worse leakage),

while a lower cut-off has better exclusion (but 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 total

net benefits (Adams and Hand, 2000; Hoadley and Oliver, 1998).

Figure 11 shows the distribution of households by targeting outcome for

Cambodia.[45] For an example cut-off of 29 or less, outcomes for 100% of the World-

Bank-definition national line in the 2011 validation sample are:

- Inclusion: 9.2 percent are below the line and correctly targeted
- Undercoverage: 7.3 percent are below the line and mistakenly not targeted
- Leakage: 7.1 percent are above the line and mistakenly targeted
- Exclusion: 76.4 percent are above the line and correctly not targeted

Increasing the cut-off to 34 or less improves inclusion and undercoverage but

worsens leakage and exclusion:

- Inclusion: 11.9 percent are below the line and correctly targeted
- Undercoverage: 4.6 percent are below the line and mistakenly not targeted
- Leakage: 13.6 percent are above the line and mistakenly targeted
- Exclusion: 69.9 percent are above the line and correctly not targeted

Which cut-off is preferred depends on total net benefit. 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.

---

[45] This paper reports targeting accuracy only for World-Bank-definition lines and for government-definition lines. If a user of the new 2011 scorecard wants to use it for targeting, then poverty lines based on one of these two definitions of *poverty* should be used. If a user of the old 2004 scorecard wants to use that scorecard for targeting, then old-definition lines must be used, and their accuracy tables are in Schreiner (2009a).

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 Figure 11 for a given 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 scoring—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.

Figure 11 shows the hit rate for all cut-offs for the Cambodia scorecard. For 100% of the World-Bank-definition national line in the 2011 validation sample, total net benefit is greatest (87.1) for a cut-off of 24 or less, with about eight in nine households in Cambodia correctly classified.

The hit rate weighs successful inclusion of households below the line the same as successful exclusion of households above the line. If a program values inclusion more (say, twice as much) than exclusion, 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 x Households correctly included) + (1 x Households correctly excluded).[46]

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 Figure 12 ("% targeted HHs who are poor") shows, for the Cambodia scorecard applied to a validation sample, the expected poverty rate among households who score at or below a given cut-off. For the example of 100% of the World-Bank-definition national line, targeting households in the 2011 validation sample who score 29 or less would target 16.3 percent of all households (second column) and would be associated with a poverty rate among those targeted of 56.4 percent (third column).

Figure 12 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 World-Bank-definition national line with the 2011 validation sample and a cut-off of 29 or less, 55.8 percent of all poor households are covered.

---

[46] Figure 11 also reports BPAC, the Balanced Poverty Accuracy Criteria adopted by USAID for certifying poverty-assessment tools. IRIS Center (2005) made BPAC to consider accuracy in terms of the bias of estimated poverty rates and in terms of targeting inclusion. BPAC = (Inclusion – |Undercoverage – Leakage|) x [100 ÷ (Inclusion + Undercoverage)]. Schreiner (2014) explains why BPAC does not add any useful information over-and-above that provided by the other, more-standard measures here.

The final targeting measure in Figure 12 is the number of successfully targeted poor households for each non-poor household mistakenly targeted (right-most column). For 100% of the World-Bank-definition national line with the 2011 validation sample and a cut-off of 29 or less, covering 1.3 poor households means leaking to 1 non-poor household.

9. The context for poverty-assessment tools in Cambodia

This section discusses seven existing poverty-assessment tools for Cambodia in terms of their goals, methods, definitions of *poverty*, data, indicators, bias, precision, and cost. In general, the advantages of the scorecard are its:

- Use of data from the most recent available nationally representative consumption survey
- Reporting bias and precision for estimates of poverty rates at a point in time from out-of-sample tests, including formulas for standard errors
- Reporting bias and precision for estimates of changes in poverty rates between two points in time from out-of-sample/out-of-time tests, including formulas for standard errors
- Fewer and lower-cost indicators
- Use of a consumption-based definition of *poverty* that is widely understood and that is used by government of Cambodia
- Feasibility for local, pro-poor programs, due to its simplicity and transparency

9.1   Gwatkin *et al.*

Gwatkin *et al.* (2007) construct a poverty-assessment tools for Cambodia with an approach that they use in 56 countries with Demographic and Health Surveys (Rutstein and Johnson, 2004). They use Principal Components Analysis to make an asset index from simple, low-cost indicators available for the 12,236 households in Cambodia's 2000 DHS.[47] The PCA index is like the scorecard here except that, because the DHS does not collect data on consumption, the index is based on a different conception of *poverty*, its accuracy vis-à-vis consumption-based poverty is unknown, and it can only be assumed

---

[47] All DHS datasets for Cambodia since 2000 include each household's score on the asset index (`dhsprogram.com/topics/wealth-index/`, retrieved 25 November 2014).

69

to be a proxy for long-term wealth/economic status.[48] Well-known examples of the PCA

asset-index approach include Stifel and Christiaensen (2007), Zeller *et al.* (2006), Sahn

and Stifel (2003 and 2000), and Filmer and Pritchett (2001).

The 21 indicators in Gwatkin *et al.* are similar to those in the scorecard in terms

of their simplicity, low cost, and verifiability:

- Characteristics of the residence:
  — Presence of electricity
  — Type of floor
  — Type of roof
  — Type of cooking fuel
  — Source of drinking water in dry season
  — Source of drinking water in rainy season
  — Type of toilet arrangement
  — Whether the residence is a houseboat
- Ownership of consumer durables:
  — Radios
  — Wardrobes
  — Sewing machines or looms
  — Televisions
  — Telephones
  — Refrigerators
  — Ox carts or horse carts
  — Bicycles
  — Motorcycles or scooters
  — Cars or trucks
  — Boats with a motor
  — Boats without a motor
- Whether members of the household work their own or family's agricultural land

---

[48] Nevertheless, the indicators are similar and the "flat maximum" is important, so
carefully built PCA indexes and consumption-based poverty-assessment tools may pick
up the same underlying construct (perhaps "permanent income", see Bollen, Glanville,
and Stecklov, 2007), and they may rank households much the same. Comparisons of
rankings by PCA indexes and consumption-based poverty-assessment tools include
Filmer and Scott (2012), Lindelow (2006), Sahn and Stifel (2003), Wagstaff and
Watanabe (2003), and Montgomery *et al.* (2000).

Gwatkin *et al.* suggest three possible uses for their index:

- Segmenting households by their quintile score to see how health varies with socio-economic status
- Monitoring (via exit surveys) how well local health-service posts reach the poor
- Measuring local coverage of health services via small-scale surveys

The first goal is akin to targeting, and the last two goals deal with performance monitoring, so the asset index would be used much like the scorecard here.

Still, the Gwatkin *et al.* index is more costly and difficult-to-use than the scorecard. While the scorecard requires adding up 10 integers (some of them likely to be zeroes), Gwatkin *et al.*'s asset index requires adding up 136 numbers, each with five decimal places and half with negative signs.

Unlike the asset index, the scorecard here is linked directly to a consumption-based poverty line. Thus, while both approaches can rank households, only the scorecard estimates consumption-based poverty status.

In essence, Gwatkin *et al.*—like all asset indexes—define *poverty* in terms of the indicators and the points in the index itself. Thus, the index is not a proxy standing in for something else (such as consumption); rather, it is a direct measure of a non-consumption-based definition of *poverty*. There is nothing wrong—and a lot right—about defining *poverty* in this way, but it is not as common as a consumption-based definition.

The asset-index approach defines people as *poor* if their assets (physical, human, financial, and social) fall below a threshold. Arguments for an asset-based view of development include Carter and Barrett (2006), Schreiner and Sherraden (2006), Sahn and Stifel (2003), and Sherraden (1991). The main advantages of the asset-based view are that:

- Asset ownership is easier to measure accurately than consumption
- Access to resources in the long term—and thus capacity to produce income and to consume—depends on the control of assets
- Assets get at capability more directly, the difference between, say, "Does income permit adequate sanitation?" versus "Does the toilet drain to a septic tank?"

While the asset view and the income/consumption view are distinct, they are also tightly linked. After all, income and consumption are flows of resources received/consumed from the use of stocks of assets. Both views are low-dimensional simplifications—due to practical limits on definitions and measurement—of a higher-dimensional and more complete conception of the production of human well-being.

9.2   Ir *et al.*

Ir *et al.* (2008) use a PCA asset index as a cross-check on the accuracy of a non-data-based ("expert") poverty-assessment tool that was developed by UNICEF to target health-equity funds in Cambodia. They define *poverty* as having qualified for a health-equity card based on an "expert" scorecard that was applied to all households in Cambodia's province of Oddar Meanchey. Four years after the initial application of the "expert" scorecard, Ir *et al.* apply both the "expert" scorecard and the asset index to a

sample of 99 cardholders (the *poor*) and 101 non-cardholders (the *non-poor*). They find

that targeting errors are "high" (without establishing a benchmark for how high is *high*),

and they speculate that this is due to changes—both positive and negative—in

households' poverty over time. Ir *et al.* recommend that card-holder status—that is,

poverty status—be updated every year or two and that pre-qualification (via a census

of at-home interviews before health services are needed) be complemented by—or

replaced with—post-qualification (via at-clinic interviews when health services are

received).

The asset index in Ir *et al.* has nine indicators:

- Marital status of the head of the household
- Job status of the head of the household
- Quality of the residence
- Ownership of consumer durables:
    — Radio or tape recorder
    — Television
    — Mobile telephone
    — Motorcycle
    — *Kouyan* (locally-made automobile used for plowing and transport)
- Amount of rice land owned

These indicators are simple and inexpensive to collect, although the housing-

quality indicator may rely on the subjective judgment of the enumerator. Ir *et al.* do not

report the asset index's points, nor what data they use to derive it.

In Ir *et al.*, a household is defined as *poor* if it scores nine or more on UNICEF's

"expert" poverty-assessment tool with nine simple, inexpensive indicators:

- Demographics:
    — Marital status of the household head (0 if married, 1 otherwise)
    — Number of household members 18-years-old or younger (0 if none, 1 if one or two, 2 if three to five, and 3 if six or more)
    — Whether any household member is dependent and elderly (0 if no, 1 if yes)
- Whether a household member has a professional occupation (0 if yes and regular, 1 if yes and irregular, 2 if no)
- Type of housing (0 if concrete or wood, 1 if leaves, thatch, or clay, 2 if none)
- Asset ownership:
    — Transportation (0 if motorcycle, 1 if bicycle or ox-cart, 2 if none)
    — Hectares of rice land (0 if more than two Ha, 1 if one or two Ha, 2 if less than one Ha)
    — Cows and buffaloes (0 if three or more, 1 if one or two, 0 if none)
    — Pigs (0 if two or more, 1 if one, 2 if none)

This "expert" scorecard classifies about one-third of households in Oddar

Meanchey as *poor*.

Accuracy cannot be compared between the scorecards in Ir *et al.* and the new

2011 scorecard here because they are applied with different populations and because the

Ir *et al.* scorecards are 100-percent accurate because they define *poverty* based on their

scores, not on consumption.

9.3 IRIS Center

USAID commissioned IRIS Center ("IRIS", 2009) to build a scorecard for use by

USAID's Cambodian microenterprise partners for reporting on their participants'

poverty rates. In line with this and with its use of the 2004 CSES, IRIS considers only

the old-definition median poverty line.

After comparing several statistical approaches, IRIS settles on quantile regression (Koenker and Hallock, 2001), choosing a quantile to make estimates of poverty rates unbiased. IRIS' 17 indicators are:

- Household demographics:
    — Number of household members (and its square)
    — Age of the household head (and its square)
    — Sex of the household head
- Education: Share of household members 6-years-old or older who are literate
- Characteristics of the residence:
    — Type of roof
    — Source of energy for lighting
    — Main fuel for cooking
    — Ecological zone
    — Urban/rural location
- Asset ownership:
    — Suitcase
    — Wardrobe or cabinet
    — Dining set
    — Television
    — Video-tape player/recorder
    — Motorcycle
- Past behavior:
    — Whether the household treated its drinking water in the past month
    — Whether the household consumed meat in the past seven days

Except for the two indicators of past behavior, IRIS' indicators are simple, verifoable, and inexpensive-to-collect. It can also be difficult to establish a household's ecological zone and its urban/rural status without consulting census maps.

IRIS reports scorecard points as regression coefficients with four decimal places and some negative values. While free software is provided to estimate groups' poverty rates, the score of any particular household is not directly available; it must be extracted from the software's internal database, complicating the process of targeting.

IRIS' preferred measure of accuracy is the "Balanced Poverty Accuracy Criterion", and USAID adopted BPAC as its criterion for certifying poverty-measurement tools for reporting by its microenterprise partners (IRIS Center, 2005). BPAC depends on inclusion and on the bias of estimated poverty rates. Under IRIS' approach, bias (the difference between an estimated versus true poverty rate) is equivalent to the difference between undercoverage and leakage. The formula is:

$$\text{BPAC} = 100 \cdot \frac{\text{Inclusion} + |\text{Undercoverage} - \text{Leakage}|}{\text{Inclusion} + \text{Undercoverage}}.$$

Because both the IRIS poverty-assessment tool and the scorecard are unbiased (even though bias under the scorecard's approach is not equivalent to the difference between its undercoverage and leakage, see Schreiner, 2014), comparisons of accuracy via BPAC boil down to comparisons based solely on inclusion (given a survey year, poverty line, definition of *poverty*, and the share of all households to be targeted). Such a comparison, however, is not reported here because:

- IRIS reports in-sample/in-time accuracy tests, and these overstate accuracy vis-à-vis the out-of-sample/out-of-time tests reported for the new 2011 scorecard here
- The new 2011 scorecard is not calibrated to the old-definition median poverty line with 2004 data because this line is not constant in real terms over time and thus changes in poverty rates by this line are not meaningful

Furthermore, IRIS uses the wrong sub-set of data from the 2004 CSES (Schreiner, 2014). Field work for the 2004 CSES took place over 15 months, from November 2003 to January 2005, but all analysts except IRIS—including the scorecard, World Bank (2006, p. 18), Knowles (2006a, p. 41), and Ministry of Planning (2006, p. 47)—use only data from interviews in calendar-year 2004. The scorecard's person-level

76

poverty rate for 100% of the old-definition national line (34.7 percent, Figure 1) matches that reported in the three sources above. Using all 15 months of data is a mistake not only because it breaks from convention but also because consumption is seasonal, and three calendar months appear twice in the 15-month data. This pulls IRIS' overall poverty rate towards the poverty rates typical in these three months. All this rules out a head-to-head comparison of IRIS with the new 2011 scorecard, as it would require reconstructing the scorecard from scratch with the 15-month data.

9.4 Knowles

Knowles (2006a and 2006b) uses the 2004 CSES to build and test poverty-assessment tools for Cambodia. In terms of purpose, approach, and spirit, Knowles' papers are similar to Narayan and Yoshida (2005) as well as the scorecard here.

9.4.1 Knowles (2006a)

Knowles (2006a) is the main source of content for World Bank (2006), and it is also the main source for Ministry of Planning (2006). Although the document focuses on the derivation of poverty lines and their use to estimate poverty rates directly from the 2004 CSES, one chapter presents and tests a poverty-assessment tool that could be used for targeting and to estimate poverty rates.

Knowles (2006a) first selects indicators by eye-balling their associations with poverty in simple cross-tabs of the entire 2003/4/5 CSES (not just households interviewed in calendar-year 2004). After randomly dividing the data into construction

and validation samples, Knowles (2006a) uses person-weighted Logit regression with the

construction sample to build a scorecard for poverty status by 100% of the old-

definition national line. The 16 indicators are:

- Number of household members
- Characteristics of the residence:
  — Type of walls
  — Type of roof
  — Source of water
  — Source of energy for lighting
- Asset ownership:
  — Beds
  — Radio
  — Television
  — Motorcycle
- Village-level indicators:
  — Population
  — Kilometers to the nearest all-weather road
  — Presence of a food shop
  — Availability of electricity
  — Availability of gas
- Location:
  — Ecological zone
  — Urban/rural

The household-level indicators are simple, inexpensive-to-collect, and verifiable.

As noted above, it is sometimes difficult to establish a household's ecological zone and

its urban/rural status without consulting census maps. More important from the point

of view of a local, pro-poor organization is that implementing Knowles' (2006a)

scorecard would require obtaining the values of the scorecard's village-level indicators.

Thus, Knowles' (2006a) scorecard would be more difficult to implement on the ground

than the new 2011 scorecard.

Knowles (2006a) does not report the bias nor precision of poverty-rate estimates based on his scorecard. He measures targeting accuracy by applying his scorecard to an out-of-sample/in-time validation sample from the 2004 CSES, targeting people whose estimated poverty likelihoods are less than 35.0 percent.

To enable comparison, the new 2011 scorecard here is applied to all households in the 2004 CSES, with the results weighted by people. Because the new 2011 scorecard is built with household weights, this puts it at a disadvantage. Furthermore, the new 2011 scorecard is tested completely out-of-sample (and, with 2004 data, out-of-time), while Knowles (2006a) chooses indicators—although not points—based on data that includes all households in his 2004 validation sample.

In the 2004 CSES, the new 2011 scorecard classifies about as well as Knowles (2006a). For a cut-off that targets 34.7 percent of people (the person-level poverty rate by 100% of the old-definition national line in 2004), Knowles (2006a) has inclusion of 27.1, exclusion of 45.5, and a hit rate of 72.6. The corresponding figures for the scorecard are 21.3 percent, 51.9 percent, and 73.2 percent. The scorecard has about the same hit rate as Knowles (2006a) even though the scorecard avoids difficult-to-use indicators, is constructed with household-level weights, and is tested completely out-of-sample/out-of-time.

9.4.2 Knowles (2006b)

Like the IDPoor program (see below), Knowles (2006b) seeks to build a practical scorecard meant to standardize efforts to target the rural poor in Cambodia. Like this paper and like IDPoor, its goals include being accurate, cost-effective, transparent, and feasible for community-level users.

Knowles (2006b) uses 11,384 rural households outside of Phnom Penh from the 2004 CSES (including households interviewed in 2003 and 2005). Rather than using Logit regression, he builds the scorecard using stepwise least-squares regression on the logarithm of per-capita household expenditure with person-level weights. The 18 indicators are:

- Household demographics:
    — Number of members
    — Number of members ages 5 or younger
    — Marital status of the household head
- Number of literate members 15-years-old or older
- Economic activity in the past twelve months:
    — Whether any member collected firewood, charcoal, timber, or forest products
    — Whether any household member operated a business
- Characteristics of the residence:
    — Type of outer wall
    — Type of roof
    — Source of energy for lighting
    — Type of toilet arrangement

- Asset ownership:
  — Wardrobe or cabinet
  — Television
  — Video-tape recorder/player
  — Cell phone
  — Motorcycle
  — Pigs
- Population of the village
- Province

All of these indicators are simple and inexpensive-to-collect (except for the population of the village) and verifiable (except for the two indicators that refer to past economic activity).

Knowles (2006b) reports an in-sample/in-time estimate of the person-level poverty rate by the 100% of the old-definition national poverty line that is too low by 6.3 percentage points.[49] For comparison, when the new 2011 scorecard is applied to the same rural sample out-of-sample/out-of-time in the 2004 CSES (excluding households interviewed in 2003 and 2005) with person-level weights and the same poverty line, the average bias in 100 bootstrapped samples of $n = 1,024$ is –14.0 percentage points. This huge bias is likely due to the test's being out-of-time, given that bias with the old 2004 scorecard in this sample is –2.6 percentage points (Schreiner, 2009a).

After selecting indicators based on the full sample, Knowles (2006b) tests out-of-sample/in-time using *cross validation* in which he does the following five times:

- Randomly divides the data into a construction and validation samples
- Derives scorecard points with the construction sample
- Measures accuracy with the validation sample

---

[49] Precision is not reported.

The results across the five tests suggest that in-sample accuracy overstates out-of-sample accuracy, but only very slightly.

For 100% of the old-definition national line, Knowles (2006b) reports inclusion of 23.8 percent and exclusion of 50.5 percent. To set up a better comparison with the new 2011 scorecard here, 100% of the old-definition national line is increased in each poverty-line region by a factor of 1.0071 so that the all-rural Cambodia person-level poverty rate using only data from interviews in calendar-year 2004 (originally 39.2 percent, Figure 1) matches the 39.8 percent reported by Knowles (2006b) for the data from interviews in 2003/4/5. Setting the cut-off for the new 2011 scorecard so that its inclusion matches the 23.8 percent reported by Knowles (2006b), exclusion for the new 2011 scorecard is 47.1 percent. Thus, Knowles (2006a) correctly classifies (in-time) about 3.4 more households per 100 than does the new 2011 scorecard (out-of-time).

Like this paper, Knowles (2006b) seeks a scorecard that is easy-to-use. To this end, he presents a three-page scorecard (versus one page here) whose points are regression coefficients multiplied by 1,000 and then rounded to whole numbers. Still, Knowles' scorecard requires multiplication and subtraction of up to four digits, while the new 2011 scorecard requires only the addition of one- or two-digit integers, some of which may be zero.

9.5 Fujii

Fujii (2006) uses "poverty mapping" (Elbers, Lanjouw, and Lanjouw, 2003) to
estimate poverty rates for 1,594 communes in Cambodia.[50] The purpose is "to identify
the location of the poor and to enable a more efficient allocation of resources". For each
of Cambodia's three poverty-line regions, Fujii uses stepwise least-squares regression of
the logarithm of per-capita consumption against indicators found both in the 1997
CSES and in the March 2008 Census as well as village-level indicators derived from the
census and from several tertiary databases. The three scorecards are then applied to the
census data with the national poverty line[51] to estimate poverty rates for smaller areas
(communes) than would be possible with only the 1997 CSES. Finally, Fujii makes
"poverty maps" that quickly show how estimated poverty rates vary across areas in a
way that makes sense to non-specialists.

---

[50] Fujii also discusses an overlay of an "education map" with Cambodia's poverty map, and Fujii (2005) presents a "malnutrition map".

[51] Fujii's measure of consumption follows Ministry of Planning (2001), and he adjusts the national poverty lines so that the person-level poverty rates in each region in his slightly-filtered 1997 CSES data match the published person-level rates, which, for Cambodia as a whole, is 36.1 percent.

The poverty mapping in Fujii has much in common with the the scorecard here in that they both:

- Build scorecards with data that is representative of a given population (all-Cambodia for the scorecard, and each of the three poverty-line regions for Fujii) and then apply them to other data on groups that are not, in general, representative of the same populations
- Estimate poverty rates for groups
- Test accuracy empirically
- Report bias
- Seek to be useful in practice and so aim to be understood by non-specialists

Strengths of poverty mapping include that it:

- Has formally established theoretical properties
- Can be applied straightforwardly to measures of well-being beyond poverty rates
- Requires data on fewer households for construction and calibration
- Includes village-level indicators, including some not found in the CSES
- Accounts for the uncertainty of its estimated coefficients when it computes standard errors
- Uses only indicators that appear in a census or in tertiary databases

Strengths of the scorecard include that it:

- Uses simple, verifiable indicators that are quick and inexpensive to collect
- Is simpler in terms of both construction and application
- Surfaces estimates of poverty likelihoods for individual households
- Provide unbiased estimates when its assumptions hold
- Reduces overfitting by selecting indicators with statistical and non-statistical criteria
- Reports confidence intervals and simple formulas for standard errors[52]
- Aims to be transparent to non-specialists

---

[52] Fujii notes that his map—unlike an earlier, "preliminary" map also based on the 1997 CSES and the 1998 Census (Fujii, 2007; Snel and Henninger, 2002; World Food Programme, 2001)—"allows for the explicit treatment of standard errors". But commune-level standard errors are not reported, so policy analysts—when ranking communes by estimated poverty rates for targeting—cannot follow Fujii's advice to consider the estimates "with caution" due to their at-times high standard errors.

The basic difference between the two approaches is that poverty mapping seeks to help governments to target pro-poor policies, while the scorecard seeks to help local pro-poor organizations to manage their social performance.[53] On a technical level, Fujii estimates consumption directly, whereas the scorecard estimates poverty likelihoods.

Fujii's three scorecards are large, complex, and probably overfit. They are not designed for use in the field by local, pro-poor organizations. For example, the rural scorecard has 16 household indicators, more than 21 community indicators, and 13 interactions (such as "30-year average maximum wind speed in December" with "main source of lighting is a kerosene lamp/pump lantern"). No indicators for asset ownership are used, probably because they do not appear in the census.

---

[53] Another apparent difference is that the developers of poverty mapping (Elbers, Lanjouw, and Lanjouw, 2003; Demombynes *et al.*, 2004) say that poverty mapping is too inaccurate to be used for targeting at the household level. In contrast, Schreiner (2008b) supports household-level targeting as a legitimate, potentially useful application of the scorecard. In Elbers *et al.* (2007), the developers of poverty mapping seem to take a small step away from their original position.

9.6   Identification of Poor Households Program

Cambodia's Identification of Poor Households Program (IDPoor) aims to standardize an approach to poverty assessment so to improve the targeting of rural development efforts by all relevant actors. The system uses a nine-page questionnaire (Ministry of Planning, 2008a) with more than 30 questions that lead to about 11 scored indicators that fit common sense and that lead "to poverty categorisation that much more closely matches local perceptions of poverty than the proxy indicators derived from [Knowles' (2006b)] regression analysis of the socioeconomic survey."[54] Some questions are not scored but rather are used to help detect exceptional cases for possible overrides (Ministry of Planning, 2009). The system is based "largely on existing practical experience in poverty identification in Cambodia by [the German Federal Enterprise for International Cooperation] and non-government organizations".

IDPoor uses a score cut-off that is selected to make the expected percentage (among all rural households in Cambodia) classified as "Poor Level 1" correspond more or less to the about-16-percent poverty rate in the 2004 CSES for the food poverty line (allowing for some poverty reduction since then).[55] Likewise, the share of rural households with scores in the range classified as "Poor Level 2" is meant to correspond more or less with the about-17-percent share between the food line and the national line

---

[54] For most households, the relevant indicators for IDPoor are similar to those in Knowles (2006b). IDPoor's point system—not being data-based—is inferior.
[55] The old 2004 scorecard (like the new 2011 scorecard) is not calibrated to Cambodia's "food" poverty line.

in the 2004 CSES. This calibration is based on scores from about 4,000 pilot households in 20 villages in three provinces in early 2007. Later tests in six provinces in 2009 showed that actual poverty rates for each of the two classes came out at about 14 percent.

As here and in Knowles (2006b), IDPoor places a premium on voluntary take-up by local users. While this paper and Knowles (2006b) encourage buy-in via a simple, quick, inexpensive, verifiable scorecard based on survey data, IDPoor encourages buy-in via avoiding gross targeting errors and through extensive community participation. As explained in IDPoor's excellent *Implementation Manual* (Ministry of Planning, 2008b, p. 2), "A key emphasis has been to maximize implementation by government structures and community representatives in order to build local capacity and enhance sustainability. The identification procedures also involve a high degree of participation and consultation with villagers themselves. This increases the transparency of the process and the accuracy of the results, and therefore the acceptability to local people." Compared with other national-level household-targeting systems in other countries, IDPoor is unique in making the commune-level data available on the internet, including the names and photos of households who score as *poor*.

IDPoor interviews are done by the elected members of a Village Representative Group. The VRG also evaluates possible overrides.[56] The process is (Ministry of Planning, 2009 and 2008b):

- List all households in a village
- Exclude households from interviews that are obviously non-poor, based on the judgment of the VRG
- Interview all remaining households
- Draft a list of poor households using both scores and non-scored items:
  — Classify as "Poor Level 1" or "very poor" those with scores of 59–68
  — Classify as "Poor Level 2" or "poor" those with scores of 45–58
  — Classify those with scores of 44 or less as "Others" or "Non-poor"
- Discuss exceptional cases in the VRG, allowing overrides of up to 10 percent of classifications based on information from non-scored items and local knowledge of circumstances
- Review the modified list with the Commune Council and other key community members
- Display in the village the draft list of poor households
- Consult with villagers at a formal meeting to identify possible misclassifications
- Prepare a revised list and display again before submitting to the Commune Council for final review and resolution of pending override requests
- Send documents to the provincial Department of Planning for data entry
- Photograph all poor households
- Prepare and distribute Equity Cards with household identification numbers, photos, and poverty class
- Update every two years

Because IDPoor is explicitly about qualifying for assistance, all households, villages, and communes would seem to have incentives to maximize the number of households classified as *poor*. Still, in areas covered in 2009, about 28 percent of households were classified as "poor" or "very poor", and few cases were reclassified due to non-score-based considerations, suggesting that gaming has not been common.

---

[56] SBK Research and Development (2008) reports that the interviews and subsequent participatory processes can strain the usually already-busy members of the VRG.

Indeed, IDPoor provincial coordinators report little—if any—evidence of villages systematically exaggerating the number of households classified as "poor" or "very poor".[57]

Like any approach, IDPoor has trade-offs. Its strength (and its weakness) is the use of a relative, local, subjective, and implicit definition of *poverty* as a complement to a quantitative, verifiable scorecard.[58] In terms of strengths, IDPoor avoids the worst mistakes of undercoverage, and it effectively achieves community buy-in and acceptance.

Still, local implementation—coupled with subjectivity and non-verifiability in both overrides and scorecard indicators—increases the risk of leakage.[59] The possibility of subjective overrides is a two-edged sword. On the one hand, it encourages the use of local knowledge to avoid egregious errors. On the other hand, without an explicit definition of *poverty*, villages can—at least in theory—use subjective overrides to exaggerate the average poverty status of its households. As mentioned above, however, to date there is no evidence of this.

---

[57] Julian Hansen, personal communication.

[58] The accuracy of the scorecard, relative to the consumption-based poverty lines in this paper, is known. While the IDPoor tool is accepted as accurate by villagers, its accuracy by any other standard is unknown.

[59] Examples of subjective or non-verifiable indicators include "General condition of the house?" and "In the past 12 months, did the household owe or borrow rice?" Perhaps more importantly, responses to IDPoor indicators—like those for the scorecard here—may simply be fabricated by the VRG or by households. The scorecard differs from IDPoor in that there is no explicit process for subjective overrides whose appropriateness is difficult to verify.

The lack of a benchmark also allows IDPoor to ignore the fact that it sometimes makes errors and that the extent of its errors is unknown. In terms of harmonization, the IDPoor *process* is exceptionally well-documented and thus standardized across Cambodia, but it is not clear how the *results* from a standardized process with relative, local, and subjective aspects can be aggregated or compared across villages, communes, or larger regions.

Still, the IDPoor approach is excellent for local buy-in and acceptance. If the incentives to overstate poverty continue to be contained, then this buy-in and acceptance is probably more important than other considerations, as it will allow IDPoor not only to focus greater attention by decision-makers and service providers on the poor but also actually help to get things done. Would that all countries had pro-poor targeting efforts as broad-based, well-designed, and available.

Why would a local, pro-poor organization in Cambodia want to use the new 2011 scorecard here, in addition to—or instead of—the IDPoor system? After all, the poverty status of households interviewed by the IDPoor program is available via the internet, and the IDPoor's definition of *poverty* is reasonable and well-accepted. For many organizations in Cambodia (and the government), IDPoor is an excellent targeting tool. For others, the relative strengths of the scorecard may justify its use. First, not every household in Cambodia has been interviewed by IDPoor. This is more common for urban households, but there are also some provinces where many rural households have yet to be interviewed. Second, IDPoor has not met its goal of updating households'

status every two years. Third, the scorecard is shorter and simpler and so less costly to apply. Fourth, scores from the scorecard are calibrated to consumption-based poverty lines, so its estimates are comparable across regions of Cambodia, organizations in Cambodia, and agencies of a given organization. For 2005 PPP lines, its estimates are (imperfectly) comparable across countries. Fifth, poverty rates based on consumption-based poverty lines are well-accepted and commonly used, especially by international organizations. In short, the low-cost scorecard may be attractive for some local, pro-poor organizations who want to estimate comparable poverty rates of known accuracy with a consumption-based definition of *poverty*.

10. Conclusion

Pro-poor programs in Cambodia can use the scorecard to segment clients for

targeted services as well as to estimate:

- The likelihood that a household has expenditure 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 between two points in time

The scorecard is inexpensive to use and can be understood by non-specialists. It

is designed to be practical for local, pro-poor organizations in Cambodia that want to

improve how they monitor and manage their social performance.

The scorecard is constructed with half of the data from Cambodia's 2011 CSES.

Its scores are then calibrated to poverty likelihoods for eight World-Bank-definition

poverty lines with 2011 data, five old-definition poverty lines with 2009 data, and eight

government-definition poverty lines with 2011 data. This allows existing users of

Cambodia's old 2004 scorecard (Schreiner, 2009a) to switch to the new 2011 scorecard

here and to find hybrid estimates of changes in poverty rates over time for old-

definition lines with a baseline with the old 2004 scorecard and a follow-up with the

new 2011 scorecard.[60] In general, the new 2011 scorecard is more accurate and more

---

[60] Hybrid estimates assume that indicators in the 2011 scorecard are based on items
with the same wording, response options, and interpretations in both the 2009 and 2011
CSES. This "identical items" assumption holds. Splicing the hybrid estimates with non-
hybrid estimates based on the new World-Bank-definition or government-definition lines
requires that poverty rates change at the same rate under both the old and new
definitions of *poverty*. This "parallel lines" assumption holds less well, although it holds
better for World-Bank-definition lines than for government-definition lines. Users who

relevant, so it—with World-Bank-definition lines or government-definition lines—should be used from now on.

The accuracy of the new 2011 scorecard is tested on data from the 2004, 2009, 2011, and 2012 CSES that is not used in construction or calibration. Bias and precision are reported for estimates of households' poverty likelihoods, groups' poverty rates at a point in time, and changes in groups' poverty rates over time. Of course, the scorecard's estimates of change are not the same as estimates of program impact. Targeting accuracy is also reported.

When the scorecard is applied to World-Bank-definition poverty lines with the 2011 validation sample, the maximum average absolute difference for estimates versus true poverty rates for groups of households at a point in time is 1.7 percentage points. The average absolute bias across the eight World-Bank-definition poverty lines is about 0.9 percentage points. Across all poverty lines with the 2011 validation sample (World-Bank- and government-definition lines) and the 2009 validation sample (old-definition lines), the average absolute bias is about 1.0 percentage points. Unbiased estimates may be had by subtracting the known bias for a given poverty line from the original estimates.

For $n = 16,384$ and 90-percent confidence, the precision of these estimates of point-in-time poverty rates is ± 0.6 percentage points or better.

---

report spliced hybrid and non-hybrid estimates should carefully discuss the how the weakness of the "parallel lines" assumption may affect accuracy.

This paper also tests the accuracy of scorecard estimates of changes in poverty rates over time, using data from pairs of past CSES rounds. On average, the ratio of the absolute bias of the estimate and the absolute true change is a little higher than 100 percent. This is disappointing, but at least scoring almost always got the direction of change right.

If an organization wants to use the scorecard for segmenting clients for targeted services, then the results here provide useful information for selecting a cut-off that fits its values and mission.

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

For this reason, the scorecard uses ten 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 simple look-up tables, and targeting cut-offs are likewise straightforward to apply. The design attempts to facilitate voluntary adoption by helping managers to understand and trust scoring and by allowing non-specialists to add up scores quickly in the field.

In summary, the scorecard is a practical, objective way for pro-poor programs in Cambodia to estimate consumption-based poverty rates, track changes in poverty rates over time, and target services. The same approach can be applied to 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.

Bollen, Kenneth A.; Glanville, Jennifer L.; and Guy Stecklov. (2007) "Socio-Economic Status, Permanent Income, and Fertility: A Latent-Variable Approach", *Population Studies*, Vol. 61, No. 1, pp. 15–34.

Caire, Dean. (2004) "Building Credit Scorecards for Small-Business Lending in Developing Markets", `microfinance.com/English/Papers/ Scoring_SMEs_Hybrid.pdf`, retrieved 21 July 2014.

_____; and Mark Schreiner. (2012) "Cross-Tab Weighting for Credit Scorecards in Developing Markets", `business-school.ed.ac.uk/crc/conferences/ conference-archive?a=46055`, retrieved 21 July 2014.

Camacho, Adriana; and Emily Conover. (2011) "Manipulation of Social-Program Eligibility", *American Economic Journal: Economic Policy*, Vol. 3, No. 2, pp. 41–65.

Carter, Michael R.; and Christopher B. Barrett. (2006) "The Economics of Poverty Traps and Persistent Poverty: An Asset-Based Approach", *Journal of Development Studies,* Vol. 42, No. 2, pp. 178–199.

Coady, David; Grosh, Margaret; and John Hoddinott. (2004) *Targeting of Transfers in Developing Countries*, `hdl.handle.net/10986/14902`, retrieved 3 November 2015.

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 Living Standards Measurement Study Working Paper No. 135, `go.worldbank.org/8YRCR9ERJ0`, retrieved 21 July 2014.

Demombynes, Gabriel; Elbers, Chris; Lanjouw, Jenny; Lanjouw, Peter; Mistiaen, Johan; and Berk Özler. (2004) "Producing an Improved Geographic Profile of Poverty: Methodology and Evidence from Three Developing Countries", pp. 154–176 in Anthony Shorrocks and Rolph van der Hoeven (eds.) *Growth, Inequality, and Poverty.*

Diamond, Alexis; Rebolledo Dellepiane, Miguel Angel; Skoufias, Emmanuel; Vinha, Katja; Xu, Yiqing; and Nobuo Yoshida. (2014) "An Evaluation of the Simple Poverty Scorecard for Estimating Poverty Rates".

Elbers, Chris; Fujii, Tomoki; Lanjouw, Peter; Özler, Berk; and Wesley Yin. (2007) "Poverty Alleviation through Geographic Targeting: How Much Does Disaggregation Help?", *Journal of Development Economics*, Vol. 83, pp. 198–213.

_____; Lanjouw, Jean O.; and Peter Lanjouw. (2003) "Micro-Level Estimation of Poverty and Inequality", *Econometrica*, Vol. 71, No. 1, pp. 355–364.

Filmer, Deon; and Lant Pritchett. (2001) "Estimating Wealth Effects without Expenditure Data—or Tears: An Application to Educational Enrollments in States of India", *Demography*, Vol. 38, No. 1, pp. 115–132.

_____; and Kinnon Scott. (2012) "Assessing Asset Indices", *Demography*, Vol. 49, pp. 359–392.

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.

Fujii, Tomoki. (2007) "To Use or Not to Use? Poverty Mapping in Cambodia", pp. 125–142 in Tara Bedi, Aline Coudouel, and Kenneth Simler (eds) *More Than a Pretty Picture: Using Poverty Maps to Design Better Policies and Interventions.*

_____. (2006) "Commune-Level Estimation of Poverty Measures and Its Application in Cambodia", pp. 289–314 in Ravi Kanbur, Anthony J. Venables, and Guanghua Wan (eds.) *Spatial Disparities in Human Development: Perspectives from Asia.*

_____. (2005) "Micro-level Estimation of Child Malnutrition Indicators and Its Application in Cambodia", World Bank Policy Research Working Paper No. 3662, `go.worldbank.org/VJVC99CE00`, retrieved 21 July 2014.

Fuller, Rob. (2006) "Measuring the Poverty of Microfinance Clients in Haiti", `microfinance.com/English/Papers/Scoring_Poverty_Haiti_Fuller.pdf`, retrieved 21 July 2014.

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/W9OWN57PD0`, retrieved 21 July 2014.

Gwatkin, Davidson R.; Rutstein, Shea; Johnson, Kiersten; Suliman, Eldaw; Wagstaff, Adam; and Agbessi Amouzou. (2007) "Socio-Economic Differences in Health, Nutrition, and Population: Cambodia", World Bank Country Reports on HNP and Poverty, `go.worldbank.org/T6LCN5A340`, retrieved 21 July 2014.

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.

Ir, Por; Decoster, Kristof; Hardeman, Wim; Horemans, Dirk; and Wim Van Damme. (2008) "Challenges in Identifying the Poor: An Assessment of Household Eligibility for a Health Equity Fund after Four Years of Pre-Identification in Oddar Meanchey, Cambodia", *Studies in Health Services Organisation and Policy*, Vol. 23, pp. 385–407.

IRIS Center. (2009) "Poverty-Assessment Tool Submission: USAID/IRIS Tool for Cambodia", revised 30 September 2009, `povertytools.org/countries/Cambodia/USAID_PAT_Cambodia.pdf`, retrieved 21 July 2014.

_____. (2007a) "Manual for the Implementation of USAID Poverty Assessment Tools", `povertytools.org/training_documents/Manuals/ USAID_PAT_Manual_Eng.pdf`, retrieved 21 July 2014.

_____. (2007b) "Introduction to Sampling for the Implementation of PATs", `povertytools.org/training_documents/Sampling/Introduction_Sampling.p pt`, retrieved 21 July 2014.

_____. (2005) "Notes on Assessment and Improvement of Tool Accuracy", `povertytools.org/other_documents/AssessingImproving_Accuracy.pdf`, retrieved 21 July 2014.

Johnson, Glenn. (2007) "Lesson 3: Two-Way Tables—Dependent Samples", `onlinecourses.science.psu.edu/stat504/node/96`, retrieved 21 July 2014.

Knowles, James C. (2012) "Poverty Profiles for Cambodia, 2009", Revision 20.01.12, Report to the EAS Country Units of the World Bank.

_____. (2006a) "A New Set of Poverty Estimates for Cambodia, 1993/4 to 2004", Revision 28.11.06, Report to the EAS Country Units of the World Bank.

_____. (2006b) "Proxy Indicators for the Identification of Poor Households in Cambodia", Report to the EAS Country Units of the World Bank.

Kolesar, Peter; and Janet L. Showers. (1985) "A Robust Credit-Screening Model Using Categorical Data", *Management Science*, Vol. 31, No. 2, pp. 124–133.

Koenker, Roger; and Kevin F. Hallock. (2001) "Quantile Regression", *Journal of Economic Perspectives*, Vol. 15, No. 4, pp. 143–156.

Lindelow, Magnus. (2006) "Sometimes More Equal Than Others: How Health Inequalities Depend on the Choice of Welfare Indicator", *Health Economics*, Vol. 15, pp. 263–279.

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/sites/mfc.org.pl/files/spotlight4.PDF`, retrieved 21 July 2014.

McNemar, Quinn. (1947) "Note on the Sampling Error of the Difference between Correlated Proportions or Percentages", *Psychometrika*, Vol. 17, pp. 153–157.

Ministry of Planning. (2014) "Poverty Estimate in 2012 in Cambodia", `mop.gov.kh/LinkClick.aspx?fileticket=McAtA9QovCA%3d&tabid=148&mid=696`, retrieved 21 July 2014.

_____. (2013) "Poverty in Cambodia—A New Approach: Redefining the Poverty Line".

_____. (2009) "Identification of Poor Households (IDPoor) in Cambodia", `mop.gov.kh/LinkClick.aspx?fileticket=ycYNM107k0I%3d&tabid=154&mid=646`, retrieved 21 July 2014.

_____. (2008a) "Questionnaire for Identification of Poor Households", `mop.gov.kh/LinkClick.aspx?fileticket=DF5pBVZUGwQ%3d&tabid=154&mid=644`, retrieved 21 July 2014.

_____. (2008b) *Implementation Manual on the Procedures for Identification of Poor Households*, `mop.gov.kh/LinkClick.aspx?fileticket=%2bn%2f1McOYvG0%3d&tabid=154&mid=644`, retrieved 21 July 2014.

_____. (2006) *A Poverty Profile of Cambodia, 2004*, `mop.gov.kh/LinkClick.aspx?fileticket=5UwPSU9lqZY%3d&tabid=191&mid=611`, retrieved 21 July 2014.

_____. (2001) "A Poverty Profile of Cambodia, 1999".

Montgomery, Mark; Gragnolati, Michele; Burke, Kathleen A.; and Edmundo Paredes. (2000) "Measuring Living Standards with Proxy Variables", *Demography*, Vol. 37, No. 2, pp. 155–174.

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`, retrieved 21 July 2014.

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.

Prescott, Nicholas; and Menno Pradhan. (1997) "A Poverty Profile of Cambodia", World Bank Discussion Paper No. 373, `www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/1997/10/01/000009265_39711 26124351/Rendered/PDF/multi_page.pdf`, accessed 21 July 2014.

Ravallion, Martin. (1998) "Poverty Lines in Theory and Practice", World Bank Living Standards Measure Survey Working Paper No. 133, `go.worldbank.org/8P3IBJPQS1`, retrieved 21 July 2014.

Rutstein, Shea Oscar; and Kiersten Johnson. (2004) "The DHS Wealth Index", DHS Comparative Reports No. 6, `measuredhs.com/pubs/pdf/CR6/CR6.pdf`, retrieved 21 July 2014.

Sahn, David E.; and David Stifel. (2003) "Exploring Alternative Measures of Welfare in the Absence of Expenditure Data", *Review of Income and Wealth*, Series 49, No. 4, pp. 463–489.

_____. (2000) "Poverty Comparisons over Time and across Countries in Africa", *World Development*, Vol. 28, No. 12, pp. 2123–2155.

SAS Institute Inc. (2004) "The LOGISTIC Procedure: Rank Correlation of Observed Responses and Predicted Probabilities", in *SAS/STAT User's Guide, Version 9*, `support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewe r.htm#statug_logistic_sect035.htm`, retrieved 21 July 2014.

SBK Research and Development. (2008) "Survey of Implementers and Stakeholders at Sub-National Level on Issues Relating to Identification of Poor Households in Kratie and Seim Reap Provinces, March–May 2008", `mop.gov.kh/LinkClick. aspx?fileticket=aDYvSKkMA9c%3d&tabid=154&mid=644`, retrieved 21 July 2014.

Schreiner, Mark. (2014) "How Do the Simple Poverty Scorecard and the PAT Differ?", `microfinance.com/English/Papers/Scorecard_versus_PAT.pdf`, retrieved 21 July 2014.

_____. (2013) "Simple Poverty Scorecard Poverty-Assessment Tool: Bangladesh", `SimplePovertyScorecard.com/BGD_2010_ENG.pdf`, retrieved 9 January 2016.

_____. (2012a) "An Expert-Based Poverty Scorecard for Rural China", `microfinance.com/English/Papers/Scoring_Poverty_China_EN.pdf`, retrieved 21 July 2014.

_____. (2012b) "Simple Poverty Scorecard Poverty-Assessment Tool: Colombia", `SimplePovertyScorecard.com/COL_2009_ENG.pdf`, retrieved 21 July 2014.

_____. (2009a) "Simple Poverty Scorecard Poverty-Assessment Tool: Cambodia", `SimplePovertyScorecard.com/KHM_2004_ENG.pdf`, retrieved 9 January 2016.

_____. (2009b) "Simple Poverty Scorecard Poverty-Assessment Tool: Peru", `SimplePovertyScorecard.com/PER_2007_ENG.pdf`, retrieved 9 January 2016.

_____. (2008a) "Simple Poverty Scorecard Poverty-Assessment Tool: Peru", `SimplePovertyScorecard.com/PER_2003_ENG.pdf`, retrieved 9 January 2016.

_____. (2008b) "Simple Poverty Scorecard Poverty-Assessment Tool: Ecuador", `SimplePovertyScorecard.com/ECU_2005_ENG.pdf`, retrieved 21 July 2014.

_____. (2006) "Is One Simple Poverty Scorecard Poverty-Assessment Tool Enough for India?", `microfinance.com/English/Papers/Scoring_Poverty_India_Segments.pdf`, retrieved 21 July 2014.

_____. (2005a) "La Herramienta del Índice de Calificación de la Pobreza™: México", `SimplePovertyScorecard.com/MEX_2002_SPA.pdf`, retrieved 21 July 2014.

_____. (2005b) "IRIS Questions on the Simple Poverty Scorecard Poverty-Assessment Tool", `microfinance.com/English/Papers/Scoring_Poverty_Response_to_IRIS.pdf`, retrieved 21 July 2014.

_____. (2002) *Scoring: The Next Breakthrough in Microfinance?* CGAP Occasional Paper No. 7, `microfinance.com/English/Papers/Scoring_Breakthrough_CGAP.pdf`, retrieved 21 July 2014.

_____; Matul, Michal; Pawlak, Ewa; and Sean Kline. (2004) "Poverty Scoring: Lessons from a Microlender in Bosnia-Herzegovina", `microfinance.com/English/Papers/Scoring_Poverty_in_BiH_Short.pdf`, retrieved 21 July 2014.

_____; and Michael Sherraden. (2006) *Can the Poor Save? Saving and Asset Accumulation in Individual Development Accounts.*

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`, retrieved 21 July 2014.

Sherraden, Michael. (1991) *Assets and the Poor: A New American Welfare Policy.*

Sillers, Don. (2006) "National and International Poverty Lines: An Overview", `pdf.usaid.gov/pdf_docs/Pnadh069.pdf`, retrieved 21 July 2014.

Snel, Mathilde; and Norbert Henninger. (2002) "Where Are the Poor? Experiences with the Use and Development of Poverty Maps", `pdf.wri.org/wherepoor.pdf`, retrieved 21 July 2014.

Stifel, David; and Luc Christiaensen. (2007) "Tracking Poverty over Time in the Absence of Comparable Consumption Data", *World Bank Economic Review*, Vol. 21, No. 2, pp. 317–341.

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. (2007) "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/gm/document-1.1.6364/PPITrainingGuide.pdf`, retrieved 21 July 2014.

USAID. (2012) *Microenterprise Results Reporting: Annual Report to Congress, Fiscal Year 2012*, `pdf.usaid.gov/pdf_docs/PDACX521.pdf`, retrieved 21 July 2014.

United States Congress. (2004) "Microenterprise Results and Accountability Act of 2004 (HR 3818 RDS)", November 20, `smith4nj.com/laws/108-484.pdf`, retrieved 21 July 2014.

Wagstaff, Adam; and Naoko Watanabe. (2003) "What Difference Does the Choice of SES Make in Health-Inequality Measurement?", *Health Economics*, Vol. 12, No. 10, pp. 885–890.

Wainer, Howard. (1976) "Estimating Coefficients in Linear Models: It Don't Make No Nevermind", *Psychological Bulletin*, Vol. 83, pp. 223–227.

World Bank. (2014) *Where Have All The Poor Gone? Cambodia Poverty Assessment 2013*, `openknowledge.worldbank.com/handle/10986/17546`, retrieved 21 July 2014.

_____. (2012) *Targeting Poor and Vulnerable Households in Indonesia*, `ausaid.gov.au/Publications/Pages/report-targeting-poor-households-indonesia.aspx`, retrieved 21 July 2014.

_____. (2008) "International Comparison Project: Tables of Results", `siteresources.worldbank.org/ICPINT/Resources/icp-final-tables.pdf`, retrieved 21 July 2014.

_____. (2006) *Cambodia: Halving Poverty By 2015? Poverty Assessment, 2006*, `go.worldbank.org/LWTE2DIAI1`, retrieved 21 July 2014.

World Food Programme. (2001). "Identifying Poor Areas in Cambodia: Combining Census and Socio-Economic Survey Data to Trace the Spatial Dimensions of Poverty".

Zeller, Manfred. (2004) "Review of Poverty Assessment Tools", `pdf.usaid.gov/pdf_docs/PNADH120.pdf`, retrieved 21 July 2014.

_____; Sharma, Manohar; Henry, Carla; and Cécile Lapenu. (2006) "An Operational Method for Assessing the Poverty Outreach Performance of Development Policies and Projects: Results of Case Studies in Africa, Asia, and Latin America", *World Development*, Vol. 34, No. 3, pp. 446–464.

Calculating Hybrid and Spliced Estimates of Change in Poverty Rates through Time

This appendix gives a step-by-step process with which existing users of the old 2004 scorecard can calculate hybrid and spliced estimates of changes in poverty rates through time. The process makes use of past applications of the old 2004 scorecard, and it also allows all users to make on-going estimates of change based on current and future applications of the new 2011 scorecard.

In general, the process involves applying a scorecard at three points in time:

- *Past*: Only old 2004 scorecard, with only old-definition poverty lines
- *Now*: Only new 2011 scorecard, potentially with poverty lines under all definitions (old, government, and World-Bank)
- *Future*: Only new 2011 scorecard, with government-definition or World-Bank-definition lines

The steps are:

1. Select an old-definition poverty line from among those supported in this paper (100%, 150%, or 200% of the national line; \$1.25/day; or \$2.50/day)

2. Estimate a baseline poverty rate for the given old-definition line:

   a. Retrieve (from a paper file, spreadsheet, or database) the poverty likelihoods for the given old-definition line for each household in the representative sample of a given population to whom the old 2004 scorecard has already been applied in the past. This likelihood is based on the look-up table for the given old-definition line in Schreiner, 2009a (not the look-up tables in this paper)

   b. Average the households' poverty likelihoods to estimate their baseline poverty rate for the given old-definition line, subtracting off known bias

3. Estimate a follow-up poverty rate for a given old-definition line:

   a. Apply the new 2011 scorecard to a representative sample of the same population to which the old 2004 scorecard was originally applied in (2a)[61]

   b. Add up the score for each household from the new 2011 scorecard

   c. Convert each household's score to a poverty likelihood using the look-up tables for the given old-definition line in this paper (not the look-up tables in Schreiner, 2009a). In this paper, the old-definition lines are explicitly labeled as "old-definition"

   d. Average the households' poverty likelihoods to estimate their follow-up poverty rate for the given old-definition line, subtracting off known bias

4. Find hybrid estimates of change for the given old-definition line:

   a. The estimated hybrid change is the estimated follow-up poverty rate (3d) minus the estimated baseline poverty rate (2b). If estimated poverty decreased through time, then the result will be a negative number

   b. The estimated hybrid change relative to the share of participants who were under the given old-definition line at baseline is the estimated hybrid change (4a) divided by the estimated baseline poverty rate (2b)

   c. The estimated net number of participants who crossed from below the given old-definition poverty line to above it since baseline is the negative of the change (4a) expressed as a proportion,[62] multiplied by the number of participants in the population at baseline

---

[61] What matters is that the sample be representative of the same population as that to which the old 2004 scorecard was originally applied. In particular, the new 2011 scorecard does not have to be applied to the same households as the old 2004 scorecard.
[62] For example, 0.123 is the proportion that is equivalent to 12.3 percentage points.

To be ready to estimate on-going changes in poverty rates over time using new-definition poverty lines, all users (legacy and new) from now on should:

5. Select a government-definition or World-Bank-definition poverty line from among those supported in this paper (100%, 150%, or 200% of the national line; $1.25/day; $2.00/day; $2.50/day; or $5.00/day 2005 PPP)[63]

6. Estimate a baseline poverty rate for the given government-definition or World-Bank-definition line:

   a. In addition to a sample of households to which the new 2011 scorecard was applied in (3a), apply the new 2011 scorecard to samples of households that are representative of any additional populations of interest

   b. Add up (or retrieve from 3b) the score for each household to which the new 2011 scorecard has been applied

   c. Convert each household's score to a poverty likelihood using the look-up tables for the given government-definition or World-Bank-definition line in this paper (not the look-up tables in Schreiner, 2009a, none of which pertain to government-definition or World-Bank-definition lines)

   d. For the sample of households to which the new 2011 scorecard was applied in 3a (and separately for any samples of households that are representative of any additional populations of interest in 6a), average the households' poverty likelihoods to estimate their baseline poverty rate for the given government-definition or World-Bank-definition line, subtracting off known bias

From this point on, all estimates of change are based solely on government-definition or World-Bank-definition lines:

7. Select a government-definition or World-Bank-definition poverty line for which a baseline poverty rate has been estimated in 6d

---

[63] The median line is omitted because it is a relative line whose real value changes with time. Thus, it is not meaningful when estimating changes in poverty.

8. Estimate a follow-up poverty rate for the given government-definition or World-Bank-definition line:

   a. Apply the new 2011 scorecard to a representative sample of the same population to which the new 2011 scorecard was originally applied (3a, as well as any additional populations represented in 6a)

   b. Add up the score for each household to which the new 2011 scorecard has just been applied (8a)

   c. Convert each household's score to a poverty likelihood using the look-up tables for the given government-definition or World-Bank-definition line in this paper (not the look-up tables in Schreiner, 2009a, none of which pertain to government-definition or World-Bank-definition lines)

   d. For the sample(s) representing a given population (8a), average the households' poverty likelihoods to get an estimate of their follow-up poverty rate for the given government-definition or World-Bank-definition line, subtracting off known bias

9. Find the (non-hybrid) estimates of change for the given government-definition or World-Bank-definition line:

   a. The estimated change is the estimated follow-up poverty rate (8d) minus the estimated baseline poverty rate (6d). If estimated poverty decreased through time, then the result will be a negative number

   b. The estimated change relative to the share of participants who were under the given government-definition or World-Bank-definition line at baseline is the change (9a) divided by the estimated baseline poverty rate (6d)

   c. The estimated net number of participants who crossed from below the government-definition or World-Bank-definition poverty line to above it since baseline is the negative of the estimated change (9a) expressed as a proportion, multiplied by the number of participants at baseline

10. Assuming that the "parallel lines" assumption holds,[64] find the "grand" estimates of change that splice together hybrid and non-hybrid estimates:

   a. The "grand" spliced estimate of change is the hybrid estimate of change (4a) for the given old-definition line plus the non-hybrid estimate of change for the given government-definition or World-Bank-definition line (9a)

   b. The "grand" spliced estimate of change relative to the share of participants who were below the given old-definition line in the past baseline is the "grand" estimate of change (10a) divided by the share of participants who were below the given old-definition line in the past baseline (2b). (There is no "grand" spliced estimate of relative change for the given government-definition or World-Bank-definition line because there is no estimate of the poverty rate by the given government-definition or World-Bank-definition line in the past baseline)

   c. The "grand" spliced estimate of the net number of participants who crossed from below the given old-definition line to above it (or from below the given government-definition or World-Bank-definition line to above it) since the past baseline is the negative of the "grand" estimate of change 10a expressed as a proportion, multiplied by the number of participants in the past baseline

---

[64] As discussed in the main text of this paper, the "parallel lines" assumption holds best for World-Bank-definition lines and for government-definition lines.

The following hypothetical example illustrates the steps:

1. *Select an old-definition poverty line from among those supported in this paper*:

    Select 100% of the old-definition national line.

2. *Estimate a baseline poverty rate for the given old-definition line*:

    a. *Retrieve (from a paper file, spreadsheet, or database) the scores and the poverty likelihoods for the given old-definition line for each household in the representative sample of a given population to whom the old 2004 scorecard has already been applied. This likelihood is based on the look-up table for the given old-definition line in Schreiner, 2009a (not the look-up tables in this paper)*

    In this hypothetical example, the scores and likelihoods for the three[65] households in the sample are:

Score	Poverty likelihood (100% of the old-definition national line)
15	56.1
20	45.3
25	34.3

    The poverty likelihoods for 100% of the old-definition national line come from p. 77 of Schreiner (2009a).[66]

    b. *Average the households' poverty likelihoods to get an estimate of their baseline poverty rate for the given old-definition line, subtracting off known bias.*

    $[(56.1 + 45.3 + 34.3) \div 3] - (-0.8) = 46.0$ percent.

    The known bias of –0.8 percentage points for 100% of the old-definition national line comes from p. 82 of Schreiner (2009a).

---

[65] Three households is an unrealistically small sample, but it is used in this hypothetical illustration to keep the arithmetic managable.

[66] This is "Figure 4 (National poverty line): Estimated poverty likelihoods associated with scores", `microfinance.com/English/Papers/ Scoring_Poverty_Cambodia_EN_2004.pdf`, retrieved 16 December 2014.

3. *Estimate a follow-up poverty rate for a given old-definition line*:

a. *Apply the new 2011 scorecard to a representative sample of the same population to which the old 2004 scorecard was originally applied in (2a)*

Draw a new sample of three households.

b. *Add up the score for each household from the new 2011 scorecard*

In this hypothetical example, the scores are 21, 26, and 31.

c. *Convert each household's score to a poverty likelihood using the look-up tables for the given old-definition line in this paper (not the look-up tables in Schreiner, 2009a)*

Look up poverty likelihoods for 100% of the old-definition national line on p. 208 in this paper.

Score	Poverty likelihood (100% of the old-definition national line)
21	30.4
26	20.8
31	14.5

d. *Average the households' poverty likelihoods to get an estimate of their follow-up poverty rate for the given old-definition line, subtracting off known bias*

$[(30.4 + 20.8 + 14.5) \div 3] - (-0.7) = 22.6$ percent.

Bias for 100% of the old-definition national line for 2009 data is –0.7 percentage points (Figure 8 on p. 157 in this paper).

4. *Find hybrid estimates of change for the given old-definition line*:

   a. *The estimated change is the estimated follow-up poverty rate (3d) minus the estimated baseline poverty rate (2b). If estimated poverty decreased through time, then the result will be a negative number*

      22.6 percent – 46.0 percent = –23.4 percentage points.

   b. *The estimated change relative to the share of participants who were under the given old-definition line at baseline is the estimated change (4a) divided by the estimated baseline poverty rate (2b)*

      –23.4 percentage points ÷ 46.0 percentage points = –50.1 percent.

   c. *The estimated net number of participants who crossed from below the given old-definition poverty line to above it since baseline is the negative of the change (4a) expressed as a proportion, multiplied by the number of participants at baseline*

      Assuming for the sake of this hypothetical illustration
      that there were 10,000 participants in the baseline population,
      –(–0.234) x 10,000 participants = 2,340 participants.

To be ready to estimate on-going changes in poverty rates over time using the government-definition or World-Bank-definition lines, all users (legacy and new) from now on should:

5. *Select a government-definition or World-Bank-definition poverty line from among those supported in this paper*

   For compatibility with the above,
   select 100% of the World-Bank-definition national line.

6. *Estimate a baseline poverty rate for the given government-definition or World-Bank-definition line:*

   a. *In addition to samples of households that are representative of the same population as that to which the new 2011 scorecard was applied in (3a), apply the new 2011 scorecard to samples of households that are representative of any additional populations of interest*

      In this example, no samples are drawn from additional populations. Thus the three households in (3a) are the only three households here.

   b. *Add up (or retrieve from 3b) the score for each household to which the new 2011 scorecard has been applied*

      The scores for the three households in 3b are 21, 26, and 31.

   c. *Convert each household's score to a poverty likelihood using the look-up tables for the given government-definition or World-Bank-definition line in this paper (not the look-up tables in Schreiner, 2009a, none of which pertain to government-definition or World-Bank-definition lines)*

      Look up the poverty likelihoods
      for 100% of the World-Bank-definition national line
      in Figure 3 on p. 149 in this paper.

Score	Poverty likelihood (100% of World-Bank-definition national line)
21	60.7
26	46.6
31	34.3

   d. *Average the households' poverty likelihoods to get an estimate of their baseline poverty rate for the given new-definition line, subtracting off known bias*

      $[(60.7 + 46.6 + 34.3) \div 3] - (+1.1) = 46.1$ percent.

      The known bias of +1.1 percentage points
      is from Figure 8 (2011 CSES) on p. 156 of this paper.

From this point on, all estimates of change are based solely on the government-definition or World-Bank-definition lines:

7. *Select a government-definition or World-Bank-definition poverty line for which a baseline poverty rate has been estimated in 6d*

   For compatibility with the above,
   select 100% of the World-Bank-definition national line.

8. *Estimate a follow-up poverty rate for the given government-definition or World-Bank-definition line*:

a. *Apply the new 2011 scorecard to a representative sample of the same population to which the new 2011 scorecard was originally applied (3a, as well as any additional populations represented in 6a)*

   Draw a new sample of three households from the same population as 3a. In this illustration, no additional samples are drawn.

b. *Add up the score for each household to which the new 2011 scorecard has just been applied*

   In this hypothetical example, the scores are 22, 27, and 37.

c. *Convert each household's score to a poverty likelihood using the look-up tables for the given government-definition or World-Bank-definition line in this paper (not the look-up tables in Schreiner, 2009a, none of which pertain to government-definition or World-Bank-definition lines)*

   Look up the poverty likelihoods
   for 100% of the World-Bank-definition national line
   in Figure 3 on p. 149 in this paper.

Score	Poverty likelihood (100% of World-Bank-definition national line)
22	60.7
27	46.6
37	20.2

d. *For the sample representing a given population, average the households' poverty likelihoods to get an estimate of their follow-up poverty rate for the given government-definition or World-Bank-definition line, subtracting off known bias*

   $[(60.7 + 46.6 + 20.2) \div 3] - (+1.1) = 41.4$ percent.

   The known bias of +1.1 percentage points
   is for 100% of the World-Bank-definition national poverty line
   from Figure 8 on p. 156 of this paper.

9. *Find non-hybrid estimates of change for the given government-definition or World-Bank-definition line:*

   a. *The estimated change is the estimated follow-up poverty rate (8d) minus the estimated baseline poverty rate (6d). If estimated poverty decreased through time, then the result will be a negative number*

      41.4 percent – 46.1 percent = –4.7 percentage points.

   b. *The estimated change relative to the share of participants who were under the given government-definition or World-Bank-definition line at baseline is the estimated change (9a) divided by the estimated baseline poverty rate (6d)*

      –4.7 percentage points ÷ 46.1 percentage points = –10.2 percent.

   c. *The estimated net number of participants who crossed from below the given government-definition or World-Bank-definition poverty line to above it since baseline is the negative of the change (9a) expressed as a proportion, multiplied by the number of participants at baseline*

      Assuming for the sake of this hypothetical illustration
      that there were 10,000 participants in the baseline population,
      –(–0.047) x 10,000 participants = 470 participants.

10. *Assuming that the "parallel lines" assumption holds, find the "grand" spliced estimates of change that combine the hybrid and non-hybrid estimates*:

    a. *The "grand" spliced estimate of change is the hybrid estimate of change for the given old-definition line (4a) plus the non-hybrid estimate of change for the given government-definition or World-Bank-definition line (9a)*

–23.4 percentage points + (–4.7 percentage points) = –28.1 percentage points.

    b. *The "grand" spliced estimate of change relative to the share of participants who were below the given old-definition line in the past baseline is the "grand" estimate of change 10a divided by the share of participants who were below the given old-definition line in the past baseline (2b). (There is no "grand" spliced estimate of relative change for the given government-definition or World-Bank-definition line because there is no estimate of the poverty rate by the given government-definition or World-Bank-definition line in the past baseline)*

    –28.1 ÷ 46.0 = –61.1 percent.

    c. *The "grand" spliced estimate of the net number of participants who crossed from below the given old-definition line to above it (or from below the given government-definition or World-Bank-definition line to above it) since the past baseline is the negative of the "grand" spliced estimate of change 10a expressed as a proportion, multiplied by the number of participants in the past baseline*

    Assuming for the sake of this hypothetical illustration
    that there were 10,000 participants in the baseline population,
    –(–0.281) x 10,000 = 2,810.

The following summarizes the process in the hypothetical illustration above. It focuses on estimates of changes in poverty rates.

Selected poverty line: 100% of national line (old-definition and World-Bank-definition)

Scores and poverty likelihoods of sampled households for 100% of the national line

Past		"Now"			Future	
Score	Pov. like. (old-def., old card) (%)	Score	Pov. like. (old-def., new card) (%)	Pov. like. (WB-def.) (%)	Score	Pov. like. (WB-def.) (%)
15	56.1	21	30.4	60.7	22	60.7
20	45.3	26	20.8	46.6	27	46.6
25	34.3	31	14.5	34.3	37	20.2
Bias	–0.8	—	–0.7	+1.1	—	+1.1
Est. pov. rate (%)	46.0	—	22.6	46.1	—	41.4

Estimated change between:

Past and now (hybrid):	22.6 – 46.0	= –23.4 percentage points
Now and future (non-hybrid):	41.4 – 46.1	= –4.7 percentage points
Past and future ("grand" spliced):	–23.4 + (–4.7)	= –28.1 percentage points
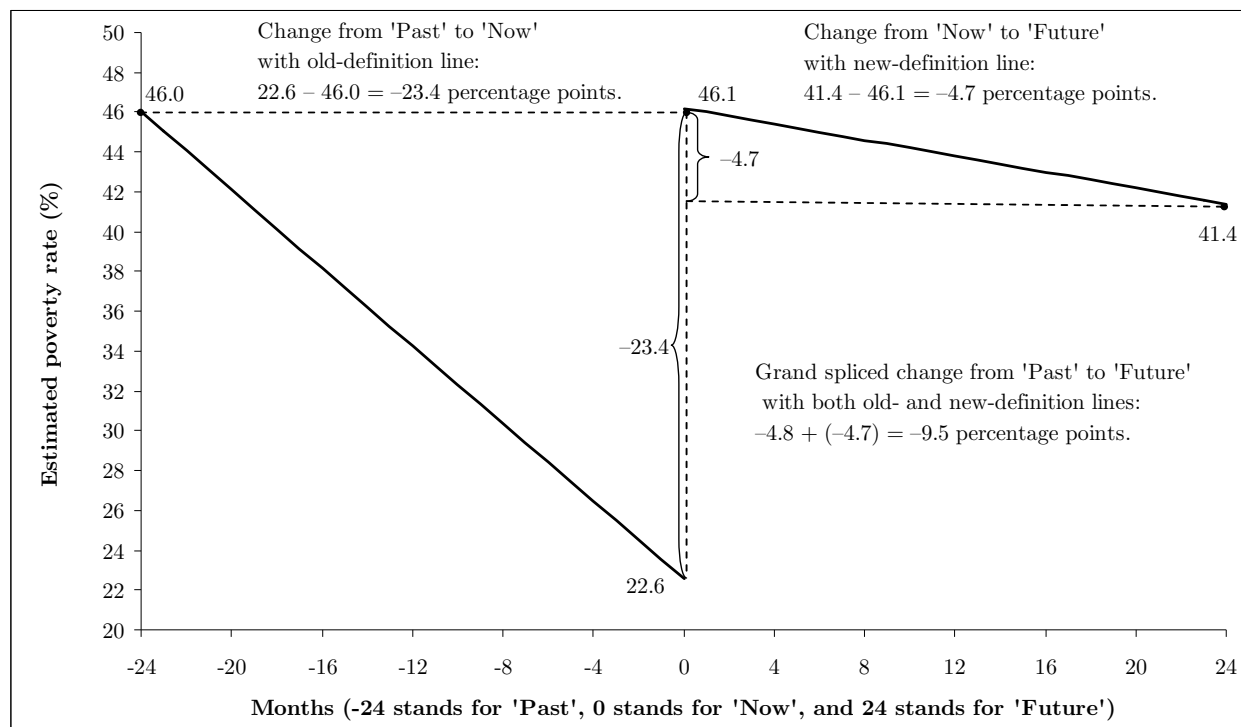
Guidelines for the Interpretation
of Scorecard Indicators

The following comes from:

National Institute of Statistics (2009) "Field-Operations Manual for Interviewers and Supervisors: Cambodia Socio-Economic Survey 2009", [the *Manual*],

and

National Institute of Statistics (2011) "Household Questionnaire: Cambodia Socio-Economic Survey 2011", [the *Questionnaire*].

General Guidelines:

Who to interview:
According to p. 8 of the *Manual*, the enumerator should interview "any responsible household member(s) who can provide accurate answers to the questions and who can give information on behalf of the household. The head of the household and/or his/her spouse would be the most qualified respondent(s)."

How to conduct an interview:
According to pp. 8–9 of the *Manual*, "Getting accurate and complete information is the prime objective. . . . As an enumerator, you can do this by being polite at all times but, at the same time, being authoritative enough to win the trust and confidence of the respondent.

"The success of the interview depends on your making a good impression. Follow these instructions:

"*Be presentable.* Make a good impression by dressing appropriately and neatly. Some people judge others by what they wear and may not open the door for someone who looks messy or untidy.

"*Introduce yourself and the survey.* While you cannot control how people will react to you, always be cordial and polite. Always try to smile. Be ready for any kind of question, and give honest answers. Never argue or quarrel with the respondent. Keep your composure even if the respondent seems irritated or indifferent.

"*Be polite.* Your introduction is important. To introduce yourself, say the following: 'Good morning/afternoon, I am [your name], an enumerator with [your

organization]. Here is my identification card. We are currently [gathering data from some of our client's households to learn more about how they live]. We would very much appreciate your answering our questions. Please be assured that all answers will be kept strictly confidential.'

"Explain the objectives of the survey. This is sometimes necessary to win a person's cooperation.

"Read and follow the instructions on the [backpage worksheet] carefully. Familiarise yourself with the questionnaire.

"*Ask all questions.* Never assume an answer [unless the Guidelines here explicitly say otherwise]. Ask a question even if you think you already know the answer. Your assumption may be mistaken.

"*If you do not understand a question or a procedure, first consult [these Guidelines].* If these Guidelines do not resolve the issue, then use your best judgment.

"*Probe if an answer is not satisfactory.* Do not accept an unsatisfactory answer; instead, probe for more information. You can also:

- Repeat the question. Asking a question several times may help a respondent to recall information from memory
- Explain the concept if necessary. There may be some technical or difficult words that need to be explained in simple terms
- Ask for an estimate, if appropriate. If the respondent cannot recall, for example, the age of his/her spouse, then try to ask for an estimate

"Thank the respondent for his/her cooperation. Always try to leave the respondent feeling good about the survey. Express your appreciation for his/her co-operation, for example, by saying 'Thank you very much for your time in answering the questions.'

"After each interview, review [the scorecard] for possible omissions. If anything is missing, please make the corrections with the help of the respondent."

How to ask questions:
According to pp. 9–10 of the *Manual*, "when asking questions, follow these rules:

"*Ask all questions exactly as they are worded in [the scorecard].* Changing the wording can change the meaning of the question and, consequently, change the answer. The questions have been written carefully in order to [match how items were asked in the Cambodia Socio-Economic Survey]. . . . You should not paraphrase the question nor try to make it clearer or easier to answer. If the respondent asks for clarification, it is fine to provide additional information, but only that provided in [these Guidelines]. If the respondent still cannot answer, [then use your best judgment to determine the best response option to mark].

"Ask the questions in the order that they appear in [the scorecard]. Do not skip items. [For the first two items, first complete the backpage worksheet, then circle the appropriate response options based on what is recorded on the backpage worksheet.]

"Do not read the response options to respondents. Try to find the response option which best fits the respondent's answer. If no option fits, then mark the response option that includes 'other'. The survey is designed to obtain information from the respondent, not to provide information to respondents. Be prepared to listen skillfully to ensure that the survey gets correct information from respondents. In exceptional cases, when the respondent seems to be unable to grasp what kind of response is relevant, then you can mention a few of the response options to give him/her some idea. But this is an exception to the rule.

"Verify that all items have a response recorded.

"Never ask a leading question. A *leading question* is one that suggests the answer that you expect. By asking a leading question, your set up the respondent to believe that the answer suggested by the question is the appropriate one. An example of a leading question is: 'Are you the head of this household?' The better way to ask is: 'Who is the head of this household?' Another example is: 'Did you consume 10 kilos of rice last week?', [in constrast to the non-leading 'How much rice did you consume last week?']"

"Be absolutely neutral. Most people are naturally polite, particularly with visitors, and they tend to try to please the visitor. Do not show any surprise, approval, nor disapproval about the respondent's answers. If the respondent asks for your opinion, do not tell her/him what you think about the subject yourself. Instead, explain that the survey seeks to find out what the respondent thinks. Do not discuss your own views with the respondent until after the interview is over. Remember that although you run the interview and that although you must be on top of the situation at all times, you are also there to listen to what the respondent has to say in response to the question posed. Always strive to be a skilled listener and to avoid trying to instruct or steer the respondent toward a particular answer.

"Maintain the tempo of the interview. Avoid lengthy discussions of the questions. If you receive seemingly irrelevant or complicated answers, do not break in too suddenly; listen carefully to what the respondent says, and then lead him/her back to the original question.

"Finish recording an answer before moving on to the next question."

What to do when a respondent has difficulty responding:

According to p. 13 of the *Manual*, "There will be some questions that some respondents will not be able to answer. This may be because they do not:

- Remember well
- Possess the information
- Understand the question

Guidelines for specific scorecard indicators

1. How many members does the household have?
    A. Eight or more
    B. Seven
    C. Six
    D. Five
    E. Four
    F. Three
    G. One or two

According to p. 26 of the *Manual*, a *household* is "a group of persons (or a single person) who usually live together and have a common arrangement for food, such as using a common kitchen or a common food budget. The persons may be related to each other or they may be non-relatives, including servants or other employees who stay with the employer.

"Students, boarders, and employees residing in and having a common food arrangement with the household are considered to be *members of the household* if they have been in the household for more than a year or if they have no other place of residence.

"However, if there are five or more boarders/lodgers in a housing unit, they should not be reported as *members of the household.*"

According to p. 27 of the *Manual*, "A *usual member of a household* is any person who has been normally living in the household and sharing arrangements for food for at least one year, or one who has no other residence. Thus, most students going to school away-from-home are considered to be *usual members of their family's household*, rather than members of a household [close to] their school, unless they have stayed continuously with the household close to their school for more than a year. However, a person who has moved recently (that is, less than one year ago), is considered to be a *usual member of a household* at his/her destination if he/she does not plan to return to the old household within one year. Similarly, a person who has moved out of a household recently with no intention to return is no longer considered to be a *usual member of that household.*

"A person is counted as a *household member* if he/she lives there or has been absent for less than 12 months.

"A person who has moved out of the household more than one year ago and who still visits the household only occasionally (such as only during major holidays a few times a year) is not considered to be a *usual member of the household*. However, a person who has had a separate residence for more than one year but who comes home regularly (on average, once a month or more frequently) is still considered to be a *usual member of the household* (for example, garment workers).

Newly-wed spouses (for example, a son-in-law or a daughter-in-law) who recently joined a household, newborn children, or a household member who commutes between the village and work or who comes home regularly from work (for the weekend, or sometimes at the end of the month, such as garment workers), are considered to be *usual members of the household*.

Newly-weds who have moved out of the household, people who have died, etc. are not counted as *usual members of the household*."

2. In the past 7 days, how many household members did any work at all, even one hour, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, weaving, etc., or working in a business or workplace (private or public sector, on their own account, or in a business belonging to someone else in the household)?
   A. None or one
   B. Two
   C. Three or more

According to p. 49 of the *Questionnaire*, a household member is counted as *working* "even if he/she did not work for even one hour in the past 7 days if he/she has a job/activity from which he/she was temporarily absent (for example, due to holiday or illness)."

According to p. 63 of the *Manual*, this question pertains to all household members 5-years-old or older.

According to p. 64 of the *Manual*, "*Work* is defined as an economic activity that a person carries out for pay, profit, or family gain. It includes, for example:

- Paid employment
- Operating a farm or business
- Working in a household economic activity (like food processing or raising livestock) without pay
- Working as an apprentice in order to learn a skill or craft, without necessarily receiving wages
- Production of paddy or vegetables, even if solely for home consumption

"If a person has a job, but he/she is temporarily absent from it because of vacation, strike, or illness, then he/she is considered to be *working.*

"Production of fixed assets for own-household use—such as building or repairing the dwelling—is also considered to be *work.*"

"Use probing questions to help the respondent understand that the following are economic activities:

- Fish pond/fishing
- Provisioning fuel and water
- Garden plot/growing vegetables
- Processing farm products (such as rice wine, bean curd, or noodles)
- Gathering forest products
- Repairs (such as to animal enclosures or buildings)"

According to the *Manual*, fetching water or collecting cooking fuel for the household's own use is also an economic activity that is considered to be *work*. The *Manual* states that the enumerator should be sure to ask about these activities, which may not be noticed/remembered or which may be judged as not being economic activities. "Do not assume that women are principally or exclusively 'homemakers'."

Nevertheless, discussions with the NIS—and analysis of the CSES data—suggest that this guideline from the *Manual* was not followed by CSES enumerators in the field. That is, CSES enumerators did not count as *work* the performance of household chores such as (for example) fetching water, collecting cooking fuel, cooking, or caring for children. Furthermore, if Cambodia were to count such non-market activities as *work*, then it would be the only country in the world to do so. Of course, all these activities— and many more—do indeed produce value and are valuable, but they are not, by definition, *economic work*.

Thus, users of the scorecard for Cambodia are advised not to follow this guideline, as it apparently was not followed in CSES fieldwork. That is, household chores should not be counted as *work*.

3. Can the female head/spouse read or write a simple message in any language?
    A. No
    B. No female head/spouse
    C. Yes

Please note that response (C) applies if the female head/spouse can only read (but not write), can only write (but not read), or can both read and write. Response (A) applies only if the female head/spouse can neither read nor write.

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

- The household head, if the head is female
- The spouse/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/partner who is also a member of the household

According to p. 31 of the *Manual*, a person is counted as being able to read (or write) a simple message even if they can no longer do so because of some physical defect or illness (for example, blindness) or if the person is blind but can read (or write) using the Braille script.

4. How many rooms in the dwelling unit are used by the household (other than kitchen, toilet, bathrooms, and store-rooms)?
    A. One
    B. Two
    C. Three or more

According to p. 37 of the *Manual*, "a *room* should have four walls with a roof and a doorway. It should be wide enough and long enough for a person to sleep in. When counting the number of rooms occupied by household, exclude any kitchens, store-rooms, bathrooms, or toilets which are not normally usable for living or sleeping. A room which is shared by more than one household will not be counted for any of them."

According to the NIS, a household that lives in a tent—even if it has no walls—is to be counted as using one room, even though it does not have four walls, a roof, and a doorway.

According to the NIS, If a household occupies only one room, and if that single room is also shared with another household, then count the number of rooms used by the interviewed household as one (1).

5. What is the primary construction material of the wall of the dwelling unit occupied by the household?
    A. Bamboo, thatch/leaves, grass, makeshift or mixed materials, clay/dung with straw, or other
    B. Wood, logs, plywood, galvanized iron or aluminium or other metal sheets, or fibrous cement/asbestos
    C. Concrete, brick, or stone

According to p. 37 of the *Manual*, "This question can be answered through observation, but, if in doubt, ask the respondent. For a two-storied house, especially in rural areas, where the ground floor is used for poultry, grain storage, storage of farm implements etc. and where the household lives on the upper floor, report the material used for the walls of the upper floor. If the dwelling has walls that are made of more than one material, then record the most important one."

According to the NIS, the "primary" or "most important" material is that which comprises the majority of the construction of the walls of the residence.

6. What is the primary construction material of the roof of the dwelling unit occupied by the household?
    A. Thatch/leaves, grass, plastic sheets, salvaged materials, mixed but predominantly thatch/leaves/grass/salvaged materials, or other
    B. Galvanized iron or aluminium, or mixed but predominantly galvanized iron/aluminium/tiles/fibrous cement
    C. Tiles, fibrous cement, or concrete

According to p. 37 of the *Manual*, "This question can be answered through observation, but, if in doubt, ask the person interviewed. . . . If the dwelling has a roof that is made of more than one material, then record the most important one."

According to the NIS, the "primary" or "most important" material is that which comprises the majority of the construction of the roof of the residence.

7. How many wardrobes or cabinets does the household own?
    A. None
    B. One
    C. Two or more

The *Manual* does not provide any additional information about this indicator.

According to the NIS, wardrobes and cabinets that are broken-but-repairable should be counted for the purposes of this indicators. Borrowed wardrobes and cabinets should not be counted.

8. Does the family own a television or a video/VCD/DVD player?
     A. No
     B. Only television
     C. Video/VCD/DVD player (regardless of TV)

The *Manual* does not provide any additional information about this indicator.

According to the NIS, televisions and video/VCD/DVD player that are broken-but-repairable should be counted for the purposes of this indicators. Borrowed televisions and video/VCD/DVD player should not be counted.

The possible combinations of ownership of televisions and video/VCD/DVD/players translate into response options as follows:

Telvision?	Video/VCD/DVD player?	Response option
No	No	A
Yes	No	B
No	Yes	C
Yes	Yes	C

9. How many landline telephones and cell phones does the household own?
    A. None
    B. One
    C. Two or more

The *Manual* does not provide any additional information about this indicator.

According to the NIS, landline telephones and cell phones that are broken-but-repairable should be counted for the purposes of this indicators. Borrowed landline telephones and cell phones should not be counted.

10. How many motorcycles or motor boats does the household own?
    A. None
    B. One
    C. Two or more

The *Manual* does not provide any additional information about this indicator.

According to the NIS, a *tuk-tuk* is not to be counted as a motorcycle.

According to the NIS, motorcycles and motor boats that are broken-but-repairable should be counted for the purposes of this indicators. Borrowed motorcycles and motor boats should not be counted.

Figure 1: World-Bank-definition poverty lines and poverty rates for Cambodia, its three poverty-line regions, and for construction/validation samples, by households and people, for 2004, 2009, and 2011

| | | | | | Poverty rates (% with consumption < poverty line) and old-definition poverty lines (KHR/day/person) | | | | | | | |
| | | | | | National poverty lines | | | | Intl. 2005 PPP | | | |
Sample	Year	Line or rate	Level	*n*	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
All Cambodia	2004	Line	People		2,512	3,767	5,023	1,792	1,909	3,054	3,817	7,635
		Rate	HHs	11,966	47.4	73.8	85.9	22.0	26.9	61.0	74.7	95.1
			People		53.2	77.7	88.2	26.6	31.9	66.1	78.4	96.1
Phnom Phen	2004	Line	People		3,361	5,041	6,721	2,681	2,554	4,086	5,108	10,216
		Rate	HHs	1,109	13.1	32.9	49.6	6.6	5.7	20.4	33.6	79.3
			People		15.8	37.1	54.4	7.9	6.9	23.7	37.8	82.9
Other urban	2004	Line	People		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
		Rate	HHs	1,705	35.7	60.3	75.0	16.7	19.4	48.7	61.3	88.2
			People		39.7	63.7	77.7	19.9	22.9	52.8	64.8	90.1
Rural	2004	Line	People		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
		Rate	HHs	9,152	52.3	79.6	90.8	24.2	29.9	66.5	80.4	97.5
			People		59.0	83.9	93.2	29.5	35.8	72.4	84.5	98.3
Validation												
Measuring accuracy		Rate	HHs	11,966	47.4	73.8	85.9	22.0	26.9	61.0	74.7	95.1
All Cambodia	2009	Line	People		4,081	6,121	8,162	3,274	2,735	4,375	5,469	10,938
		Rate	HHs	11,956	20.1	48.8	68.5	9.5	4.4	24.7	40.2	83.2
			People		23.9	54.0	72.9	12.0	5.7	29.0	45.3	86.2
Phnom Phen	2009	Line	People		5,326	7,990	10,653	4,405	3,569	5,711	7,139	14,277
		Rate	HHs	1,107	3.3	12.9	29.3	1.6	0.6	4.1	9.0	51.4
			People		4.3	15.7	33.7	2.1	1.0	5.5	11.4	56.8
Other urban	2009	Line	People		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
		Rate	HHs	1,330	10.4	30.1	47.0	4.9	1.6	13.2	24.2	66.3
			People		12.7	34.4	51.6	6.4	2.2	16.2	28.2	70.3
Rural	2009	Line	People		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
		Rate	HHs	9,519	23.1	54.9	75.3	11.0	5.1	28.3	45.5	88.6
			People		27.5	60.8	80.0	13.8	6.6	33.2	51.3	91.5
Validation												
Measuring accuracy	2009	Rate	HHs	11,956	20.1	48.8	68.5	9.5	4.4	24.7	40.2	83.2
All Cambodia	2011	Line	People		4,637	6,955	9,273	3,825	3,000	4,800	6,000	12,000
		Rate	HHs	3,586	16.4	49.5	71.3	7.8	2.3	18.9	36.8	84.7
			People		20.5	56.4	76.4	10.3	3.2	23.7	43.3	87.6
Phnom Phen	2011	Line	People		6,014	9,021	12,029	5,172	3,891	6,226	7,782	15,565
		Rate	HHs	743	1.3	11.4	26.4	0.5	0.0	2.3	6.9	45.2
			People		1.5	14.4	30.5	0.8	0.0	2.7	9.3	49.9
Other urban	2011	Line	People		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
		Rate	HHs	638	11.2	36.3	57.4	5.4	2.1	12.9	25.0	73.1
			People		16.1	43.9	64.7	8.1	3.6	18.3	31.1	78.3
Rural	2011	Line	People		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
		Rate	HHs	2,205	19.0	56.2	79.0	9.1	2.6	21.9	42.2	91.5
			People		23.7	63.9	84.3	11.9	3.5	27.3	49.6	94.0
Construction and calibration (Selecting indicators and points, and associating scores with likelihoods)												
	2011	Rate	HHs	1,824	16.3	49.5	71.5	7.5	2.0	19.0	36.7	84.7
Validation												
Measuring accuracy	2011	Rate	HHs	1,762	16.5	49.5	71.1	8.1	2.6	18.8	36.8	84.7

Source: 2004, 2009, and 2011 CSES. Poverty lines in average calendar-year prices.

All poverty lines are per-person. Sampling weights are those associated with World-Bank-definition poverty lines.

Figure 1: Old-definition poverty lines and poverty rates for Cambodia, its three poverty-line regions, and for construction/validation samples, by households and people, for 2004 and 2009

Sample	Year	Line or rate	Level	n	National poverty lines			Intl. 2005 PPP	
					100%	150%	200%	$1.25	$2.50
All Cambodia	2004	Line	People		1,825	2,738	3,651	1,909	3,818
		Rate	HHs	11,988	30.2	57.9	73.8	33.1	75.8
			People		34.7	62.5	77.1	37.8	78.7
Phnom Phen	2004	Line	People		2,351	3,527	4,702	2,459	4,918
		Rate	HHs	1,109	3.9	13.8	28.2	4.8	31.3
			People		4.6	16.3	32.6	5.7	35.4
Other urban	2004	Line	People		1,952	2,928	3,904	2,042	4,084
		Rate	HHs	1,709	21.8	45.7	61.6	24.5	63.3
			People		24.7	49.7	64.4	27.6	66.0
Rural	2004	Line	People		1,753	2,630	3,506	1,833	3,666
		Rate	HHs	9,170	33.8	63.8	79.8	37.0	81.7
			People		39.2	69.0	83.4	42.6	85.1
Validation									
Measuring accuracy		Rate	HHs	11,988	30.2	57.9	73.8	33.1	75.8
All Cambodia	2009	Line	People		3,328	4,992	6,655	2,735	5,469
		Rate	HHs	11,970	11.7	36.4	57.8	5.0	43.6
			People		14.6	41.6	63.1	6.5	48.9
Phnom Phen	2009	Line	People		4,185	6,278	8,370	3,439	6,878
		Rate	HHs	1,113	1.3	6.6	17.8	0.8	9.8
			People		1.8	8.6	21.8	1.1	12.2
Other urban	2009	Line	People		3,458	5,187	6,916	2,842	5,683
		Rate	HHs	1,331	5.4	20.7	37.3	1.9	26.2
			People		6.9	24.4	41.8	2.6	30.3
Rural	2009	Line	People		3,213	4,820	6,426	2,640	5,281
		Rate	HHs	9,526	13.6	41.5	64.6	5.9	49.3
			People		17.0	47.4	70.4	7.6	55.4
Calibration (associating scores with likelihoods)									
	2009	Rate	HHs	5,935	11.3	36.5	57.9	5.0	43.4
Validation									
Measuring accuracy	2009	Rate	HHs	6,035	12.2	36.3	57.7	5.0	43.8

Header spanning note: Poverty rates (% with consumption < poverty line) and old-definition poverty lines (KHR/day/person)

Source: 2004 and 2009 CSES. Poverty lines in average calendar-year prices.

All poverty lines are per-person. Sampling weights are those associated with old-definition poverty lines.

Figure 1: Government-definition poverty lines and poverty rates for Cambodia, its three poverty-line regions, and for construction/validation samples, by households and people, for 2009, 2011, and 2012

Sample	Year	Line or rate	Level	n	National poverty lines				Intl. 2005 PPP			
					100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
All Cambodia	2009	Line	People		3,863	5,795	7,727	2,133	2,735	4,375	5,469	10,938
		Rate	HHs	11,970	19.2	48.4	68.9	9.2	5.4	27.0	43.8	86.0
			People		22.7	53.9	73.7	11.4	6.8	31.5	49.2	89.0
Phnom Phen	2009	Line	People		6,347	9,521	12,694	5,136	4,492	7,188	8,985	17,970
		Rate	HHs	1,113	9.7	34.6	59.5	4.7	2.6	14.9	30.0	81.2
			People		12.8	41.1	65.0	6.4	3.6	18.8	36.0	84.8
Other urban	2009	Line	People		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321
		Rate	HHs	1,331	16.3	36.8	55.9	8.0	4.9	22.1	33.8	77.0
			People		19.3	41.0	60.4	9.6	6.2	25.6	38.0	80.5
Rural	2009	Line	People		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889
		Rate	HHs	9,526	20.7	51.5	71.7	9.8	5.7	29.1	46.7	87.8
			People		24.4	57.1	76.5	12.2	7.3	33.8	52.2	90.7
Validation												
Measuring accuracy		Rate	HHs	11,970	19.2	48.4	68.9	9.2	5.4	27.0	43.8	86.0
All Cambodia	2011	Line	People		4,399	6,599	8,799	3,696	3,000	4,800	6,000	12,000
		Rate	HHs	3,592	15.9	49.2	73.3	7.7	2.8	21.1	42.0	89.3
			People		19.8	55.7	78.0	9.9	3.8	25.8	47.4	91.8
Phnom Phen	2011	Line	People		7,162	10,742	14,323	6,178	4,883	7,814	9,767	19,534
		Rate	HHs	747	8.1	31.1	53.7	4.1	0.3	10.6	23.6	79.2
			People		10.9	37.4	59.9	5.5	0.6	13.7	29.2	82.9
Other urban	2011	Line	People		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395
		Rate	HHs	638	17.2	43.8	64.2	7.7	4.4	21.1	37.0	83.8
			People		22.5	51.3	71.3	11.3	6.5	27.1	43.9	87.6
Rural	2011	Line	People		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782
		Rate	HHs	2,207	16.7	52.2	77.0	8.1	2.9	22.5	43.9	91.4
			People		20.7	58.8	81.4	10.3	3.8	27.2	50.4	93.5
Calibration (Associating scores with likelihoods)												
	2011	Rate	HHs	1,829	15.8	48.8	73.2	7.6	2.7	20.8	41.0	89.2
Validation												
Measuring accuracy	2011	Rate	HHs	1,763	15.9	49.5	73.3	7.7	2.8	21.4	41.0	89.4
All Cambodia	2012	Line	People		4,540	6,810	9,080	3,855	3,086	4,938	6,172	12,344
		Rate	HHs	3,840	15.2	49.3	73.4	7.3	2.1	20.8	39.6	88.6
			People		18.9	54.9	77.9	9.4	3.0	25.3	45.0	91.0
Phnom Phen	2012	Line	People		7,391	11,086	14,781	6,368	5,023	8,038	10,047	20,094
		Rate	HHs	780	11.3	42.2	72.9	5.3	1.6	17.1	33.0	88.2
			People		16.2	50.4	78.0	8.1	3.0	23.2	40.4	91.1
Other urban	2012	Line	People		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742
		Rate	HHs	700	11.5	35.8	58.2	5.4	0.9	13.8	26.7	77.5
			People		14.4	39.7	63.6	7.2	1.3	17.2	30.4	81.2
Rural	2012	Line	People		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064
		Rate	HHs	2,360	16.4	52.5	76.1	7.9	2.4	22.5	42.6	90.6
			People		20.0	58.0	80.2	10.0	3.2	27.0	48.0	92.6
Validation												
Measuring accuracy	2012	Rate	HHs	3,840	15.2	49.3	73.4	7.3	2.1	20.8	39.6	88.6

Source: 2009, 2011, and 2012 CSES. Poverty lines in average calendar-year prices.
All poverty lines are per-person. Sampling weights are those associated with government-definition poverty lines.

136

Figure 2: Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
1,293	What is the main source of lighting for the household? (None, candle, kerosene lamp, or other; Battery; Publicly-provided electricity/city power, or generator)
1,156	How many household members are 16-years-old or younger? (Four or more; Three; Two; One; None)
1,134	How many household members are 15-years-old or younger? (Four or more; Three; Two; One; None)
1,076	How many household members are 17-years-old or younger? (Four or more; Three; Two; One; None)
1,054	How many household members are 18-years-old or younger? (Four or more; Three; Two; One; None)
965	How many household members are 13-years-old or younger? (Three or more; Two; One; None)
965	How many members does the household have? (Eight or more; Seven; Six; Five; Four; Three; One or two)
957	How many wardrobes or cabinets does the household own? (None; One; Two or more)
946	How many household members are 14-years-old or younger? (Three or more; Two; One; None)
857	What toilet facility does your household have within the premises (in the area close to the residence)? (None, pit latrine without slab or with an open pit, or other; Pit latrine with slab, or latrine overhanging field or water (drop in the field, pond, river, lake, sea); Pour flush (or flush) connected to septic tank or pit, or elsewhere (that is, not a sewer nor tank/pit); Pour flush (or flush) connected to sewerage)
839	How many household members are 11-years-old or younger? (Three or more; Two; One; None)
833	How many household members are 12-years-old or younger? (Three or more; Two; One; None)
793	What is the primary construction material of the wall of the dwelling unit occupied by the household? (Bamboo, thatch/leaves, grass, makeshift or mixed materials, clay/dung with straw, or other; Wood, logs, plywood, galvanized iron or aluminium or other metal sheets, or fibrous cement/asbestos; Concrete, brick, or stone)
764	Does the household own any electric fans? (No; Yes)
729	Does the household own any electric kitchen/gas stoves? (No; Yes)
728	Does the family own a television or a Video/VCD/DVD player? (No; Only television; Video/VCD/DVD player (regardless of TV))

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
674	How many landline telephones and cell phones does the household own? (None; One; Two or more)
663	Does the household own any televisions? (No; Yes)
642	Does the household own any bicycles or row boats, motorcycles or motor boats, or cars, jeeps/vans, tractors, or bulldozer/rollers? (None; Only bicycles or row boats; Only motorcycles or motor boats; Both bicycles or row boats, and motorcycles or motor boats (but no cars etc.); Cars, jeeps/vans, tractors, or bulldozer/rollers (regardless of all others))
617	How many motorcycles or motor boats does the household own? (None; One; Two or more)
615	How many household members are 6-years-old or younger? (Two or more; One; None)
604	In their main (primary) occupation/economic activity in the past 7 days, how many household members were in elementary occupations or were skilled agricultural or fishery workers? (Five or more; Two, three, or four; One; None)
588	What is the floor area of the dwelling unit occupied by the household (in square meters)? (1 to 20; 21 to 30; 31 to 69; 70 or more)
584	What the main source of drinking water in the dry season for the household? (Dug unprotected well, or dug protected well (including all of the following: lining, headwall, platform, cover), or public tap; Pond, river, or stream (whether fetched or pumped to the residence); Tubed/piped well or borehole; Bottled water, or water purchased from tanker truck, vendor, or otherwise purchased (whether vender delivers to the residence or household member goes to fetch), or unimproved or improved rainwater collection (catchment tank has all of the following: completely closed, tap to withdraw water, and at least 3000-liter capacity), or other; Piped in dwelling or on premises)
579	What is the highest educational level that the male head/spouse has successfully completed? (None, pre-school/kindergarten, class one, or other; Class two; Class three; Class four; Class five; No male head/spouse; Class six; Class seven; Class eight to 11; Class 12, lower or upper secondary-school certificate, technical/vocational pre-secondarypost-secondary diploma/certificate, college/university undergraduate, bachelor's degree (B.A., BSc, etc.), master's degree (M.A., MSc, etc.), or doctorate (PhD))

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
566	How many rooms in the dwelling unit are used by the household (other than kitchen, toilet, bathrooms, and store-rooms)? (One; Two; Three or more)
563	Does the household own any electric irons? (No; Yes)
543	What type of fuel does your household mainly use for cooking? (Firewood, kerosene, publicly-provided electricity/city power, household generator, none/does not cook, other; Charcoal; Liquefied petroleum gas (LPG))
537	In their main occupation/activity in the past 7 days, how many household members worked in an industry/business (economic activity) in agriculture, hunting, or forestry? (Five or more; Four; Three; Two; One; None)
514	What the main source of drinking water in the wet season for the household? (Dug unprotected well, or dug protected well (including all of the following: lining, headwall, platform, cover), or public tap; Pond, river, or stream (whether fetched or pumped to the residence); Tubed/piped well or borehole; Bottled water, or water purchased from tanker truck, vendor, or otherwise purchased (whether vender delivers to the residence or household member goes to fetch), or unimproved or improved rainwater collection (catchment tank has all of the following: completely closed, tap to withdraw water, and at least 3000-liter capacity), or other; Piped in dwelling or on premises)
506	Does the household own any bicycles or row boats, or motorcycles or motor boats? (None, or only bicycles or row boats; Only motorcycles or motor boats; Both bicycles or row boats, and motorcycles or motor boats)
493	What is the primary construction material of the roof of the dwelling unit occupied by the household? (Thatch/leaves, grass, plastic sheets, salvaged materials, mixed but predominantly thatch/leaves/grass/salvaged materials, or other; Galvanized iron or aluminium, or mixed but predominantly galvanized iron/aluminium/tiles/fibrous cement; Tiles, fibrous cement, or concrete)
467	In their main (primary) occupation/economic activity during the past 7 days, how many household members were in elementary occupations? (Two or more; One; None)
461	How many household members ages 7 to 16 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 16)

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
460	What is the highest educational level that the female head/spouse has successfully completed? (None, pre-school/kindergarten, class one, or other; Class two; Class three; Class four; Class five; Class six; Class seven; No female head/spouse; Class eight to 11; Class 12, lower or upper secondary-school certificate, technical/vocational pre-secondarypost-secondary diploma/certificate, college/university undergraduate, bachelor's degree (B.A., BSc, etc.), master's degree (M.A., MSc, etc.), or doctorate (PhD))
454	How many household members ages 7 to 13 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 13)
454	How many household members ages 7 to 17 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 17)
432	How many household members ages 7 to 15 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 15)
415	How many household members ages 7 to 14 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 14)
409	Does the household own any videos/VCDs/DVD players/recorders, or satellite dishes? (No; Yes)
387	How many household members ages 7 to 18 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 18)
387	How many household members ages 7 to 11 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 11)
373	What is the primary construction material of the floor of the housing/dwelling unit occupied by the household? (Wooden planks, bamboo strips, vinyl, or other; Earth or clay; Cement/brick/stone, parquet or polished wood, polished stone or marble, or ceramic tiles)
347	How many household members ages 7 to 12 are currently in the school system? (If a child is on holiday, then he/she is considered as being in the school system) (Not all; All; No members ages 7 to 12)

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
345	What was the primary occupation of the female head/spouse? (Elementary occupation; Skilled agricultural and fishery worker; Does not work; Craft and related trades worker, or plant and machine operator and assembler; No female head/spouse; Services worker, or shop and market sales worker; Legislator, senior official, manager, professional, technician or associate professional, or clerk)
341	Does your household have any outstanding debts to relatives (whether in Cambodia or abroad), friends/neighbors, traders, landlords, employers, banks, or NGOs (non-profit and for-profit)? (Yes; No)
333	Did you household boil or otherwise treat its drinking water in the last month? (No, never; Sometimes; Yes, always)
299	What was the primary occupation of the male head/spouse? (Elementary occupation; Skilled agricultural and fishery worker; Does not work; Craft and related trades worker; No male head/spouse; Services worker, shop and market sales worker, or plant and machine operator and assembler; Legislator, senior official, manager, professional, technician and associate professional, or clerk)
285	Does the household own any bed sets (bed, mattress . . .)? (No; Yes)
279	How many suitcases (box for storage/travelling) does the household own? (None; One; Two; Three or more)
276	Can the male head/spouse both read and write a simple message in any language? (None, read only, or write only; No male head/spouse; Both read and write)
264	Does the household own any sofa sets or dining sets (dining table plus chairs)? (No; Yes)
254	Can the female head/spouse read or write a simple message in any language? (No; No female head/spouse; Yes)
239	In the past 7 days, how many household members did any work at all, even one hour, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, etc., or working in a business or workplace (private or public sector, on his/her own account, or in a business belonging to someone else in the household)? (None or one; Two; Three; Four or more)
223	In their main (primary) occupation/economic activity during the past 7 days, how many household members were skilled agricultural or fishery workers? (Five or more; Four; Three; Two; One; None)

141

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
219	In what kind of industry/business (economic activity) did the male head/spouse work in his main occupation/activity (for example, agriculture, manufacturing, construction, hotel/restaurant, trade, etc.) in the past 7 days? (Agriculture, hunting, or forestry; Does not work; Mining and quarrying, or manufacturing; Electricity, gas, stream, and air-conditioning supply, or construction; No male head/spouse; Other)
204	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any buffaloes? (Someone works in agriculture, and the household owns some buffaloes; Someone works in agriculture, but the household does not own any buffaloes; No one works in agriculture)
204	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any horses or ponies? (Someone works in agriculture, and the household owns some horses or ponies; Someone works in agriculture, but the household does not own any horses or ponies; No one works in agriculture)
199	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any carts (pulled by an animal), ploughs, rice mills, or water pumps? (Someone works in agriculture, but the household does not own any carts (pulled by an animal), ploughs, rice mills, or water pumps; Someone works in agriculture, and the household owns some carts (pulled by an animal), ploughs, rice mills, or water pumps; No one works in agriculture)
194	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does anyone in the household own or operate any land that is used (or could be used) for vegetable gardening, agricultural, or farming activities (crop cultivation, livestock-raising, or private forestry? (Someone works in agriculture, but no one in the household owns or operates agricultural land; Someone works in agriculture, and someone in the household owns or operates agricultural land; No one works in agriculture)
192	Does the household own any cars, jeeps/vans, tractors, or bulldozer/rollers? (No; Yes)
184	Does the household own any refrigerators or feezers? (No; Yes)

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
183	In what kind of industry/business (economic activity) did the female head/spouse work in her main occupation/activity (for example, agriculture, manufacturing, construction, hotel/restaurant, trade, etc.) in the past 7 days? (Agriculture, hunting, or forestry; Does not work; Mining and quarrying, manufacturing, electricity, gas, stream, and air-conditioning supply, or construction; Wholesale and retail trade, or repair of motor vehicles and motorcycles; Other; No female head/spouse)
181	Does the household own any computers (desktop or laptop)? (No; Yes)
178	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any pigs? (Someone works in agriculture, and the household owns some pigs; Someone works in agriculture, but the household does not own any pigs; No one works in agriculture)
178	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any cattle, buffaloes, horses, ponies, or pigs? (Someone works in agriculture, and the household owns some cattle, buffaloes, horses, ponies, or pigs; Someone works in agriculture, but the household does not own any cattle, buffaloes, horses, ponies, or pigs; No one works in agriculture)
176	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any cattle? (Someone works in agriculture, and the household owns some cattle; Someone works in agriculture, but the household does not own any cattle; No one works in agriculture)
175	If any household members, in their main (primary) occupation/economic activity during the past 7 days, were skilled agricultural or fishery workers, then does the household own any cattle, buffaloes, horses, or ponies? (Someone works in agriculture, and the household owns some cattle, buffaloes, horses, or ponies; Someone works in agriculture, but the household does not own any cattle, buffaloes, horses, or ponies; No one works in agriculture)
165	In their main (primary) occupation/economic activity in the past 7 days, how many household members worked as employees or as employers? (None; One; Two; Three or more)
151	Does your household have any outstanding debts to NGOs (non-profit and for-profit)? (Yes; No)

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
142	In their main (primary) occupation/economic activityduring the past 7 days, how many household members were service workers or shop-and-market-sales workers? (None; One; Two or more)
134	Does your household have any outstanding debts to relatives (whether in Cambodia or abroad) or friends/neighbors? (Yes; No)
132	Does the household own any radios (*vitju*) or stereos? (None; Only radio; Stereo (regardless of radio))
113	Does your household have any outstanding debts to banks or NGOs (non-profit and for-profit)? (No; Yes)
111	In their main (primary) occupation/economic activity in the past 7 days, how many household members were unpaid family workers (contributing family workers)? (Three or more; Two; One; None)
93	Does the household own any sewing machines? (No; Yes)
87	Is the male or female head/spouse an own-account/self-employed worker in a non-agricultural activity? (No; Yes)
85	In their main (primary) occupation/economic activity in the past 7 days, how many household members were own-account workers or unpaid family workers (contributing family workers)? (Five or more; Four; Three; Two; One; None)
79	Does the household own any stereos? (No; Yes)
70	Does the household own any washing machines and dishwashers? (No; Yes)
65	Does the household own or operate any agricultural land? (Yes; No)
64	Does the household own any air conditioners? (No; Yes)
60	In their main (primary) occupation/economic activityduring the past 7 days, how many household members were craft and related trades workers? (None; One; Two or more)
50	Does anyone in your household have difficulty seeing, hearing, speaking, moving, feeling or sensing, psychological or behaviorial difficulties, learning difficulties, fits, or other disabilities? (Yes; No)
49	ass_radio Does the household own any radios (*vitju*)? (No; yes)

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
47	What was the employment status of the female head/spouse? (Unpaid family worker (contributing family worker), or other; Employee; Does not work; Employer, or own-account worker; No female head/spouse)
30	Does the household own any water pumps? (No; Yes)
26	Did the female head/spouse do any work at all, even one hour, during the past 7 days, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, etc., or working in a business or workplace (private or public sector, on her own account, or in a business belonging to someone else in the household)? Although the female head/spouse did not work even for one hour during the past 7 days, did she have a job from which she was temporarily absent (e.g., due to holiday or illness)? (Yes; No; No female head/spouse)
24	Does your household have any outstanding debts to traders, landlords, or employers? (Yes; No)
23	What was the employment status of the male head/spouse? (Own-account worker, employer, unpaid family worker (contributing family worker), or other; Does not work; Employee; No male head/spouse)
20	What is the marital status of the female head/spouse? (Currently married/living together, or divorced/separated; Widowed; No female head/spouse; Never married/never lived with partner)
19	Does the household own any ploughs? (No; Yes)
16	Does the household own any carts (pulled by an animal)? (No; Yes)
15	In their main (primary) occupation/economic activityduring the past 7 days, how many household members were service workers or shop-and-market-sales workers or craft and related trades workers? (None; One; Two; Three or more)

Figure 2 (cont.): Poverty indicators by uncertainty coefficient

Uncertainty coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
9	Did the male head/spouse do any work at all, even one hour, during the past 7 days, such as working or helping on a farm, grinding grain, making palm sugar, caring for animals, etc., or working in a business or workplace (private or public sector, on his own account, or in a business belonging to someone else in your household)? Although the male head/spouse did not work even for one hour during the past 7 days, did he have a job from which he was temporarily absent (e.g., due to holiday or illness)? (No; Yes; No male head/spouse)
8	How many bicycles or row boats does the household own? (None; One; Two or more)
8	In their main (primary) occupation/economic activity in the past 7 days, how many household members were own-account workers? (Two or more; One; None)
7	What is the marital status of the male head/spouse? (Currently married/living together, or divorced/separated; No male head/spouse; Never married/never lived with partner, or widowed)
6	Does the household own any carts (pulled by an animal), ploughs, rice mills, or water pumps? (No; Yes)
5	What is the structure of household headship? (Both male and female heads/spouses; Female head/spouse only; Male head/spouse only)
1	Does the household own any batteries? (No; Yes)
0	Does your household have any outstanding debts to banks? (No; Yes)
0	Does the household own any rice mills? (No; Yes)

Source: 2011 CSES questionnaire and 100% of the World-Bank-definition national poverty line

Figures for
100% of the World-Bank-Definition National Poverty Line

(and Figures Pertaining
to Multiple Poverty Lines
across All Definitions of *Poverty*)

Figure 3 (100% of the World-Bank-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	94.9
10–14	88.6
15–19	73.8
20–24	60.7
25–29	46.6
30–34	34.3
35–39	20.2
40–44	10.5
45–49	5.5
50–54	0.7
55–59	0.2
60–64	0.2
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 4 (100% of the World-Bank-definition national line): Derivation of estimated poverty likelihoods associated with scores

Score	Households at score and < poverty line		All households at score		Poverty likelihood (%)
0–4	86	÷	86	=	100.0
5–9	527	÷	556	=	94.9
10–14	651	÷	735	=	88.6
15–19	2,139	÷	2,897	=	73.8
20–24	2,533	÷	4,172	=	60.7
25–29	3,664	÷	7,867	=	46.6
30–34	3,129	÷	9,120	=	34.3
35–39	2,340	÷	11,580	=	20.2
40–44	1,329	÷	12,607	=	10.5
45–49	612	÷	11,059	=	5.5
50–54	70	÷	10,073	=	0.7
55–59	18	÷	9,253	=	0.2
60–64	15	÷	7,685	=	0.2
65–69	0	÷	6,371	=	0.0
70–74	0	÷	3,367	=	0.0
75–79	0	÷	1,510	=	0.0
80–84	0	÷	735	=	0.0
85–89	0	÷	221	=	0.0
90–94	0	÷	108	=	0.0
95–100	0	÷	0	=	0.0

Number of all households normalized to sum to 100,000.

Figure 5 (World-Bank-definition poverty lines): Probability that a given household's daily per-capita consumption falls in a range demarcated by two adjacent World-Bank-definition poverty lines in the 2011 CSES

	Likelihood (%) that daily per-capita consumption is in a range demarcated by adjacent World-Bank-definition poverty lines								
	<$1.25/day	≥$1.25/day and <Median	≥Median and <100% Natl.	≥100% Natl. and <$2.00/day	≥$2.00/day and <$2.50/day	≥$2.50/day and <150% Natl.	≥150% Natl. and <200% Natl.	≥200% Natl. and <$5.00/day	≥$5.00/day
Score	<KHR3,000	≥KHR3,000 and <KHR3,825	≥KHR3,825 and <KHR4,637	≥KHR4,637 and <KHR4,800	≥KHR4,800 and <KHR6,000	≥KHR6,000 and <KHR6,955	≥KHR6,955 and <KHR9,273	≥KHR9,273 and <KHR12,000	≥KHR12,000
0–4	42.0	53.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0
5–9	42.0	42.9	10.0	0.7	0.3	4.1	0.0	0.0	0.0
10–14	17.4	54.4	16.9	2.8	0.6	7.9	0.0	0.0	0.0
15–19	10.1	31.3	32.4	3.7	14.5	5.0	2.9	0.0	0.0
20–24	9.3	22.4	29.0	1.3	29.9	4.5	3.6	0.0	0.0
25–29	7.5	15.7	23.3	5.9	26.9	13.8	4.3	1.9	0.5
30–34	4.1	11.3	19.0	5.1	34.3	12.9	10.9	2.0	0.5
35–39	0.4	5.5	14.2	4.4	30.4	19.6	21.9	3.0	0.5
40–44	0.2	2.6	7.7	4.2	28.3	19.3	27.6	8.5	1.4
45–49	0.1	0.7	4.7	2.9	16.8	17.3	34.4	16.3	6.9
50–54	0.0	0.0	0.7	1.2	14.0	15.6	38.8	19.0	10.8
55–59	0.0	0.0	0.2	0.8	4.3	9.8	30.3	26.7	27.8
60–64	0.0	0.0	0.2	0.4	0.4	8.0	29.7	28.6	32.7
65–69	0.0	0.0	0.0	0.0	0.6	1.5	12.6	35.2	50.2
70–74	0.0	0.0	0.0	0.0	0.0	0.0	6.8	18.9	74.3
75–79	0.0	0.0	0.0	0.0	0.0	0.0	5.6	13.9	80.4
80–84	0.0	0.0	0.0	0.0	0.0	0.0	1.6	13.6	84.7
85–89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
90–94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
95–100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0

Figure 5 (Old-definition poverty lines): Probability that a given household's daily per-capita consumption falls in a range demarcated by two adjacent old-definition poverty lines in the 2009 CSES

	Likelihood (%) that daily per-capita consumption is in a range demarcated by adjacent old-definition poverty lines					
	<$1.25/day	≥$1.25/day and <100% Natl.	≥100% Natl. and <150% Natl.	≥150% Natl. and <$2.50/day	≥$2.50/day and <200% Natl.	≥200% Natl.
Score	<KHR2,735	≥KHR2,735 and <KHR3,328	≥KHR3,328 and <KHR4,992	≥KHR4,992 and <KHR5,469	≥KHR5,469 and <KHR6,655	≥KHR6,655
0–4	73.5	14.0	12.4	0.0	0.0	0.0
5–9	32.0	25.8	33.7	3.1	5.2	0.3
10–14	30.3	21.2	38.1	4.9	4.2	1.3
15–19	21.2	19.5	39.6	4.7	10.0	5.0
20–24	14.2	16.3	44.4	5.2	12.4	7.6
25–29	9.7	11.1	45.6	8.8	12.6	12.2
30–34	5.4	9.1	37.4	10.1	16.0	22.0
35–39	2.3	6.2	34.8	10.9	20.2	25.7
40–44	1.6	3.4	23.5	9.1	21.1	41.4
45–49	0.9	2.5	18.1	5.9	21.0	51.5
50–54	0.3	0.8	11.0	6.4	14.3	67.3
55–59	0.2	0.3	5.4	4.6	11.3	78.2
60–64	0.2	0.3	2.4	2.9	6.3	88.0
65–69	0.1	0.1	1.1	0.4	2.3	96.1
70–74	0.0	0.0	0.2	0.6	1.5	97.7
75–79	0.0	0.0	0.0	0.2	0.3	99.6
80–84	0.0	0.0	0.0	0.0	0.0	100.0
85–89	0.0	0.0	0.0	0.0	0.0	100.0
90–94	0.0	0.0	0.0	0.0	0.0	100.0
95–100	0.0	0.0	0.0	0.0	0.0	100.0

Figure 5 (Government-definition poverty lines): Probability that a given household's daily per-capita consumption falls in a range demarcated by two adjacent government-definition poverty lines in the 2011 CSES

	Likelihood (%) that daily per-capita consumption is in a range demarcated by adjacent government-definition poverty lines								
Score	<$1.25/day ≥KHR3,000 and <KHR3,000	≥$1.25/day and <Median ≥KHR3,000 and <KHR3,696	≥Median and <100% Natl. ≥KHR3,696 and <KHR4,399	≥100% Natl. and <$2.00/day ≥KHR4,399 and <KHR4,800	≥$2.00/day and <$2.50/day ≥KHR4,800 and <KHR6,000	≥$2.50/day and <150% Natl. ≥KHR6,000 and <KHR6,599	≥150% Natl. and <200% Natl. ≥KHR6,599 and <KHR8,799	≥200% Natl. and <$5.00/day ≥KHR8,799 and <KHR12,000	≥$5.00/day ≥KHR12,000
0–4	41.4	14.4	44.2	0.0	0.0	0.0	0.0	0.0	0.0
5–9	41.4	14.4	36.1	0.0	3.5	2.3	2.2	0.0	0.0
10–14	26.4	29.4	18.7	6.3	10.5	4.5	4.2	0.0	0.0
15–19	11.8	19.9	28.0	4.5	23.7	7.7	4.2	0.0	0.0
20–24	10.0	15.8	24.7	9.2	27.6	7.5	5.2	0.0	0.0
25–29	9.6	13.4	18.3	13.6	25.4	7.0	8.6	3.7	0.3
30–34	6.3	8.8	14.6	8.7	36.7	5.3	14.6	3.4	1.5
35–39	1.0	7.1	13.0	6.3	31.0	8.1	25.9	5.3	2.4
40–44	0.7	2.5	6.2	6.7	28.7	9.1	32.5	10.2	3.3
45–49	0.3	2.1	5.6	3.0	20.2	10.5	33.4	18.5	6.5
50–54	0.1	1.9	2.7	3.4	17.2	10.6	33.1	21.7	9.4
55–59	0.1	0.4	2.8	1.8	11.4	7.6	30.1	28.6	17.2
60–64	0.0	0.5	0.9	0.6	6.0	9.6	32.2	29.2	21.1
65–69	0.0	0.4	0.7	0.4	4.7	3.0	25.1	34.5	31.2
70–74	0.0	0.0	0.0	0.0	0.6	3.6	14.5	33.0	48.3
75–79	0.0	0.0	0.0	0.0	0.0	1.1	11.1	38.6	49.2
80–84	0.0	0.0	0.0	0.0	0.0	0.0	9.2	36.3	54.6
85–89	0.0	0.0	0.0	0.0	0.0	0.0	8.8	25.0	66.2
90–94	0.0	0.0	0.0	0.0	0.0	0.0	6.8	22.3	70.9
95–100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1	70.9

Figure 6 (100% of the World-Bank-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2011 validation sample

| Score | Diff. | Difference between estimate and true value | | |
| | | Confidence interval ($\pm$percentage points) | | |
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	−5.1	2.5	2.5	2.5
10–14	+22.2	7.2	8.7	10.7
15–19	−17.2	9.6	9.8	10.2
20–24	+4.9	3.2	3.9	5.3
25–29	+6.5	2.2	2.8	3.7
30–34	+7.3	1.9	2.3	3.2
35–39	+1.3	1.5	1.7	2.3
40–44	+0.2	1.1	1.3	1.8
45–49	+0.2	0.8	1.0	1.3
50–54	−1.7	1.1	1.2	1.3
55–59	+0.1	0.0	0.1	0.1
60–64	−0.2	0.2	0.3	0.4
65–69	−0.7	0.6	0.6	0.7
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (100% of the World-Bank-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

| Sample Size n | Difference between estimate and true value | | | |
| | | Confidence interval (±percentage points) | | |
	Diff.	90-percent	95-percent	99-percent
1	+1.3	63.2	68.0	80.9
4	+1.4	26.3	33.9	42.9
8	+1.4	19.3	23.6	31.0
16	+1.2	14.1	16.3	20.6
32	+0.9	9.9	11.7	14.9
64	+0.9	7.1	8.3	10.6
128	+1.1	4.8	5.7	7.7
256	+1.1	3.3	4.0	5.2
512	+1.1	2.5	2.9	4.0
1,024	+1.1	1.7	2.1	2.9
2,048	+1.1	1.2	1.4	1.9
4,096	+1.1	0.8	1.0	1.3
8,192	+1.1	0.6	0.7	0.9
16,384	+1.1	0.4	0.5	0.6

Figure 8 (World-Bank-definition poverty lines): Average differences between estimates and true values for poverty rates of a group of households at a point in time, precision, and the α factor for precision, 2011 scorecard applied to the 2004, 2009, and 2011 validation samples

| | | Poverty line | | | | | | | |
| | | National poverty lines | | | | Intl. 2005 PPP | | | |
	Year	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
Estimate minus true value	2004	−12.3	−0.5	+2.9	−2.2	−21.6	−22.3	−13.9	+0.2
	2009	+3.0	+10.2	+10.3	+2.1	−1.2	+1.5	+5.9	+6.2
	2011	+1.1	+1.5	+0.3	−0.0	−0.5	+1.6	+1.7	−0.2
Precision of difference	2004	0.5	0.4	0.4	0.5	0.6	0.5	0.4	0.2
	2009	0.5	0.5	0.5	0.4	0.2	0.5	0.5	0.4
	2011	0.4	0.5	0.5	0.3	0.2	0.5	0.5	0.4
α factor for precision	2004	0.84	0.69	0.60	1.27	2.13	0.94	0.72	0.47
	2009	0.94	0.83	0.82	0.97	0.97	0.92	0.86	0.81
	2011	0.89	0.82	0.81	0.98	1.08	0.87	0.85	0.84

Differences between estimates and true values are displayed in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of ± percentage points.

Differences and precision estimated from 1,000 bootstraps with $n = 16,384$.

α is estimated from 1,000 bootstrap samples of $n = 256, 512, 1,024, 2,048, 4,096, 8,192$, and $16,384$.

Figure 8 (Old-definition poverty lines): Average differences between estimates and true values for poverty rates of a group of households at a point in time, precision, and the α factor for precision, 2011 scorecard applied to the 2009 and 2004 validation samples

| | | Poverty line | | | | |
| | | National poverty lines | | | Intl. 2005 PPP | |
	Year	100%	150%	200%	$1.25	$2.50
Estimate minus true value	2004	−12.5	−8.5	−2.6	−25.1	−18.9
	2009	−0.7	+0.7	+0.5	+0.1	+0.2
Precision of difference	2004	0.5	0.6	0.5	0.6	0.5
	2009	0.4	0.5	0.6	0.3	0.6
α factor for precision	2004	0.92	0.87	0.86	0.98	0.88
	2009	0.93	0.85	0.83	0.98	0.85

Differences between estimates and true values are displayed in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of ± percentage points.

Differences and precision estimated from 1,000 bootstraps with $n = 16,384$.

α is estimated from 1,000 bootstrap samples of $n = 256, 512, 1,024, 2,048, 4,096, 8,192$, and $16,384$.

Figure 8 (Government-definition poverty lines): Average differences between estimates and true values for poverty rates of a group of households at a point in time, precision, and the α factor for precision, 2011 scorecard applied to the 2009, 2011, and 2012 validation samples

| | | Poverty line | | | | | | | |
| | | National poverty lines | | | | Intl. 2005 PPP | | | |
	Year	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
Estimate minus true value	2009	+2.0	+8.3	+10.0	+1.6	−1.2	−0.1	+5.1	+5.7
	2011	+1.8	+2.3	+1.5	+0.4	+0.1	+1.6	+2.9	+0.6
	2012	+0.1	−1.6	−1.1	+0.0	+0.4	−0.9	+0.5	+0.0
Precision of difference	2009	0.5	0.6	0.5	0.3	0.3	0.5	0.5	0.4
	2011	0.5	0.6	0.5	0.4	0.2	0.5	0.6	0.4
	2012	0.5	0.6	0.5	0.3	0.2	0.5	0.6	0.4
α factor for precision	2009	0.92	0.88	0.89	0.93	0.95	0.89	0.90	0.92
	2011	0.95	0.90	0.90	1.01	1.06	0.93	0.89	0.93
	2012	0.98	0.94	0.90	1.04	1.13	0.98	0.94	0.87

Differences between estimates and true values are displayed in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of ± percentage points.

Differences and precision estimated from 1,000 bootstraps with $n = 16{,}384$.

α is estimated from 1,000 bootstrap samples of $n = 256, 512, 1{,}024, 2{,}048, 4{,}096, 8{,}192$, and $16{,}384$.

Figure 9 (World-Bank-definition poverty lines): Average differences between estimates and true values for changes in poverty rates of groups of households between two points in time (2011 and 2009, and 2011 and 2004), precision, and the α factor for precision, 2011 scorecard applied to the 2004, 2009, and 2011 validation samples

		Poverty line							
		National poverty lines					Intl. 2005 PPP		
		100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
Estimated change minus true change									
2011 scorecard applied to 2011 validation sample and all of 2004		–13.4	–2.1	+2.6	—	–21.1	–24.0	–15.7	+0.4
2011 scorecard applied to 2011 validation sample and all of 2009		+1.9	+8.7	+10.0	—	–0.7	–0.1	+4.2	+6.4
Precision of estimated change minus true change									
2011 scorecard applied to 2011 validation sample and all of 2004		0.7	0.7	0.6	—	0.6	0.7	0.7	0.4
2011 scorecard applied to 2011 validation sample and all of 2009		0.6	0.7	0.7	—	0.3	0.7	0.7	0.6
α factor for precision of estimated change									
2011 scorecard applied to 2011 validation sample and all of 2004		0.75	0.85	0.92	—	0.73	0.76	0.87	1.17
2011 scorecard applied to 2011 validation sample and all of 2009		0.89	0.83	0.80	—	0.92	0.95	0.85	0.83
Differences between estimates of changes and true changes are displayed in units of percentage points.									
Precision is measured as 90-percent confidence intervals in units of ± percentage points.									
Differences and precision estimated from 1,000 bootstraps with n = 16,384.									
α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.									

Figure 9 (Old-definition poverty lines): Average differences between estimates and true values for changes in poverty rates of groups of households between two points in time (2009 and 2004), precision, and the α factor for precision, 2011 scorecard applied to the 2009 and 2004 validation samples

	Poverty line				
	National poverty lines			Intl. 2005 PPP	
	100%	150%	200%	$1.25	$2.50
Estimated change minus true change					
2011 scorecard applied to 2009 validation sample and all of 2004	–11.8	–9.2	–3.0	–25.2	–19.1
Precision of estimated change minus true change					
2011 scorecard applied to 2009 validation sample and all of 2004	0.7	0.8	0.8	0.6	0.8
α factor for precision of estimated change					
2011 scorecard applied to 2009 validation sample and all of 2004	0.80	0.84	0.90	0.77	0.95
Differences between estimates of changes and true changes are displayed in units of percentage points.					
Precision is measured as 90-percent confidence intervals in units of ± percentage points.					
Differences and precision estimated from 1,000 bootstraps with n = 16,384.					
α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.					

Figure 9 (Government-definition poverty lines): Average differences between estimates and true values for changes in poverty rates of groups of households between two points in time (2011 and 2009, and 2011 and 2012), precision, and the α factor for precision, 2011 scorecard applied to the 2009, 2011, and 2012 validation samples

		Poverty line							
		National poverty lines					Intl. 2005 PPP		
		100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
Estimated change minus true change									
2011 scorecard applied to 2011 validation sample and all of 2009		+0.2	+5.9	+8.5	—	–1.4	–1.7	+2.2	+5.1
2011 scorecard applied to 2011 validation sample and all of 2012		–1.7	–3.9	–2.6	—	+0.2	–2.4	–2.4	–0.6
Precision of estimated change minus true change									
2011 scorecard applied to 2011 validation sample and all of 2009		0.7	0.7	0.7	—	0.4	0.7	0.8	0.6
2011 scorecard applied to 2011 validation sample and all of 2012		0.7	0.8	0.7	—	0.3	0.7	0.8	0.5
α factor for precision of estimated change									
2011 scorecard applied to 2011 validation sample and all of 2009		0.89	0.87	0.87	—	0.87	0.88	0.89	0.88
2011 scorecard applied to 2011 validation sample and all of 2012		0.97	0.92	0.88	—	1.01	0.97	0.92	0.91
Differences between estimates of changes and true changes are displayed in units of percentage points.									
Precision is measured as 90-percent confidence intervals in units of ± percentage points.									
Differences and precision estimated from 1,000 bootstraps with n = 16,384.									
α is estimated from 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.									

Figure 10 (All poverty lines): Possible targeting outcomes

		Targeting segment	
		Targeted	**Non-targeted**
True poverty status	**Below poverty line**	**Inclusion** Below poverty line correctly targeted	**Undercoverage** Below poverty line mistakenly non-targeted
	Above poverty line	**Leakage** Above poverty line mistakenly targeted	**Exclusion** Above poverty line correctly non-targeted

Figure 11 (100% of the World-Bank-definition national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	16.4	0.0	83.5	83.6	−99.0
≤9	0.6	15.8	0.0	83.5	84.2	−92.2
≤14	1.1	15.4	0.2	83.3	84.4	−84.7
≤19	3.8	12.7	0.5	83.0	86.7	−51.3
≤24	6.0	10.5	2.4	81.1	87.1	−12.2
≤29	9.2	7.3	7.1	76.4	85.6	+54.7
≤34	11.9	4.6	13.6	69.9	81.8	+17.6
≤39	14.0	2.5	23.0	60.5	74.5	−39.5
≤44	15.4	1.1	34.2	49.3	64.7	−107.4
≤49	16.1	0.4	44.6	38.9	55.0	−170.4
≤54	16.4	0.1	54.4	29.1	45.5	−229.7
≤59	16.4	0.1	63.6	19.9	36.3	−285.6
≤64	16.4	0.0	71.2	12.3	28.7	−332.0
≤69	16.5	0.0	77.6	5.9	22.4	−370.3
≤74	16.5	0.0	80.9	2.6	19.1	−390.8
≤79	16.5	0.0	82.4	1.1	17.6	−399.9
≤84	16.5	0.0	83.2	0.3	16.8	−404.4
≤89	16.5	0.0	83.4	0.1	16.6	−405.7
≤94	16.5	0.0	83.5	0.0	16.5	−406.4
≤100	16.5	0.0	83.5	0.0	16.5	−406.4

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (100% of the World-Bank-definition national line):
Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.5	Only poor targeted
≤9	0.6	100.0	3.9	Only poor targeted
≤14	1.4	82.9	6.9	4.8:1
≤19	4.3	87.9	22.8	7.3:1
≤24	8.4	71.4	36.6	2.5:1
≤29	16.3	56.4	55.8	1.3:1
≤34	25.4	46.6	71.9	0.9:1
≤39	37.0	37.9	85.0	0.6:1
≤44	49.6	31.1	93.5	0.5:1
≤49	60.7	26.5	97.6	0.4:1
≤54	70.8	23.1	99.3	0.3:1
≤59	80.0	20.5	99.5	0.3:1
≤64	87.7	18.8	99.7	0.2:1
≤69	94.1	17.5	100.0	0.2:1
≤74	97.4	16.9	100.0	0.2:1
≤79	98.9	16.7	100.0	0.2:1
≤84	99.7	16.5	100.0	0.2:1
≤89	99.9	16.5	100.0	0.2:1
≤94	100.0	16.5	100.0	0.2:1
≤100	100.0	16.5	100.0	0.2:1

Tables for
150% of the World-Bank-Definition
National Poverty Line

Figure 3 (150% of the World-Bank-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	100.0
10–14	100.0
15–19	97.1
20–24	96.4
25–29	93.3
30–34	86.6
35–39	74.6
40–44	62.4
45–49	42.5
50–54	31.4
55–59	15.1
60–64	9.0
65–69	2.1
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (150% of the World-Bank-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

| Score | Diff. | Difference between estimate and true value Confidence interval ($\pm$percentage points) | | |
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+16.6	6.1	7.1	9.5
15–19	−2.9	1.5	1.5	1.5
20–24	+4.1	1.7	2.0	2.5
25–29	+4.7	1.4	1.7	2.3
30–34	+5.0	1.8	2.1	2.7
35–39	−8.7	5.1	5.2	5.5
40–44	+10.4	1.8	2.2	3.0
45–49	−4.0	3.0	3.2	3.5
50–54	+9.5	1.7	2.1	2.6
55–59	+0.6	1.5	1.8	2.3
60–64	−1.7	1.6	1.9	2.4
65–69	−7.2	4.4	4.6	4.9
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (150% of the World-Bank-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+1.0	66.1	77.6	95.6
4	+1.8	33.5	39.8	51.9
8	+2.2	24.1	28.2	37.7
16	+1.8	17.1	20.1	27.8
32	+1.4	12.0	14.5	19.8
64	+1.3	8.6	10.1	13.4
128	+1.6	5.6	6.7	8.9
256	+1.5	4.2	5.1	6.7
512	+1.5	3.0	3.5	4.7
1,024	+1.5	2.1	2.6	3.2
2,048	+1.5	1.5	1.8	2.3
4,096	+1.5	1.1	1.2	1.6
8,192	+1.5	0.7	0.9	1.2
16,384	+1.5	0.5	0.6	0.9

e

Figure 11 (150% of the World-Bank-definition national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	49.4	0.0	50.5	50.6	−99.7
≤9	0.6	48.9	0.0	50.5	51.1	−97.4
≤14	1.3	48.2	0.1	50.4	51.7	−94.6
≤19	4.2	45.3	0.1	50.4	54.6	−82.9
≤24	8.0	41.5	0.4	50.1	58.1	−66.7
≤29	15.0	34.5	1.3	49.2	64.1	−36.8
≤34	22.6	26.9	2.8	47.7	70.3	−3.0
≤39	32.3	17.2	4.7	45.8	78.1	+40.0
≤44	39.2	10.3	10.4	40.1	79.4	+79.0
≤49	44.4	5.1	16.3	34.2	78.7	+67.2
≤54	46.8	2.7	23.9	26.6	73.4	+51.7
≤59	48.2	1.3	31.8	18.7	66.9	+35.8
≤64	49.0	0.5	38.7	11.8	60.7	+21.8
≤69	49.5	0.0	44.6	5.9	55.4	+10.0
≤74	49.5	0.0	47.9	2.6	52.1	+3.2
≤79	49.5	0.0	49.4	1.1	50.6	+0.2
≤84	49.5	0.0	50.2	0.3	49.8	−1.3
≤89	49.5	0.0	50.4	0.1	49.6	−1.8
≤94	49.5	0.0	50.5	0.0	49.5	−2.0
≤100	49.5	0.0	50.5	0.0	49.5	−2.0

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (150% of the World-Bank-definition national line):
Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.2	Only poor targeted
≤9	0.6	100.0	1.3	Only poor targeted
≤14	1.4	93.0	2.6	13.2:1
≤19	4.3	97.7	8.4	43.2:1
≤24	8.4	95.2	16.2	19.7:1
≤29	16.3	91.8	30.3	11.3:1
≤34	25.4	88.9	45.6	8.0:1
≤39	37.0	87.3	65.3	6.9:1
≤44	49.6	79.1	79.3	3.8:1
≤49	60.7	73.2	89.7	2.7:1
≤54	70.8	66.2	94.6	2.0:1
≤59	80.0	60.3	97.4	1.5:1
≤64	87.7	55.8	98.9	1.3:1
≤69	94.1	52.6	100.0	1.1:1
≤74	97.4	50.8	100.0	1.0:1
≤79	98.9	50.0	100.0	1.0:1
≤84	99.7	49.7	100.0	1.0:1
≤89	99.9	49.6	100.0	1.0:1
≤94	100.0	49.5	100.0	1.0:1
≤100	100.0	49.5	100.0	1.0:1

Tables for
200% of the World-Bank-Definition
National Poverty Line

Figure 3 (200% of the World-Bank-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	100.0
10–14	100.0
15–19	100.0
20–24	100.0
25–29	97.5
30–34	97.5
35–39	96.5
40–44	90.0
45–49	76.8
50–54	70.2
55–59	45.4
60–64	38.7
65–69	14.7
70–74	6.8
75–79	5.6
80–84	1.6
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (200% of the World-Bank-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

| Score | Diff. | Difference between estimate and true value | | |
| | | Confidence interval ($\pm$percentage points) | | |
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	+0.0	0.0	0.0	0.0
20–24	+2.1	0.9	1.1	1.4
25–29	+1.7	0.9	1.1	1.4
30–34	−0.9	0.7	0.8	0.9
35–39	−0.4	0.6	0.7	1.0
40–44	+7.2	1.5	1.8	2.4
45–49	−0.1	1.7	2.1	2.6
50–54	+4.9	2.0	2.3	3.0
55–59	−6.8	4.5	4.6	5.0
60–64	+0.7	2.5	2.9	3.8
65–69	−9.4	6.0	6.2	6.6
70–74	−10.3	6.7	7.1	7.7
75–79	+5.6	0.0	0.0	0.0
80–84	+1.6	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (200% of the World-Bank-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Difference between estimate and true value			
	Diff.	Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+0.6	69.1	87.7	95.4
4	+0.4	29.2	36.8	48.1
8	+0.5	20.9	25.3	34.7
16	+0.1	15.4	18.0	23.1
32	+0.4	10.5	12.9	16.4
64	+0.2	7.5	8.8	11.8
128	+0.3	5.2	6.3	8.7
256	+0.3	3.8	4.5	5.7
512	+0.3	2.5	3.1	4.2
1,024	+0.3	1.8	2.2	2.8
2,048	+0.3	1.3	1.6	2.1
4,096	+0.3	1.0	1.1	1.4
8,192	+0.3	0.7	0.8	0.9
16,384	+0.3	0.5	0.6	0.7

Figure 11 (200% of the World-Bank-definition national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	71.0	0.0	28.9	29.0	−99.8
≤9	0.6	70.4	0.0	28.9	29.6	−98.2
≤14	1.4	69.7	0.0	28.9	30.3	−96.1
≤19	4.3	66.8	0.0	28.9	33.2	−88.0
≤24	8.4	62.7	0.1	28.9	37.2	−76.3
≤29	15.9	55.1	0.4	28.5	44.5	−54.6
≤34	24.9	46.2	0.5	28.4	53.3	−29.2
≤39	36.1	35.0	1.0	28.0	64.0	+2.8
≤44	46.7	24.4	2.9	26.0	72.7	+35.5
≤49	55.2	15.8	5.5	23.5	78.7	+63.1
≤54	61.6	9.4	9.1	19.8	81.4	+86.3
≤59	66.4	4.7	13.6	15.3	81.8	+80.9
≤64	69.2	1.9	18.5	10.4	79.6	+73.9
≤69	70.6	0.4	23.4	5.5	76.1	+67.0
≤74	71.1	0.0	26.4	2.6	73.6	+62.9
≤79	71.1	0.0	27.9	1.1	72.1	+60.8
≤84	71.1	0.0	28.6	0.3	71.4	+59.7
≤89	71.1	0.0	28.8	0.1	71.2	+59.4
≤94	71.1	0.0	28.9	0.0	71.1	+59.3
≤100	71.1	0.0	28.9	0.0	71.1	+59.3

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (200% of the World-Bank-definition national line):
Share of all households who are targeted (that is, score at or
below a cut-off), the share of targeted households who are
poor (that is, have consumption below the poverty line), the
share of poor households who are targeted, and the number
of poor households who are successfully targeted (inclusion)
per non-poor household mistakenly targeted (leakage), 2011
scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.1	Only poor targeted
≤9	0.6	100.0	0.9	Only poor targeted
≤14	1.4	100.0	1.9	Only poor targeted
≤19	4.3	100.0	6.0	Only poor targeted
≤24	8.4	99.0	11.8	101.2:1
≤29	16.3	97.6	22.4	40.3:1
≤34	25.4	97.9	35.0	46.2:1
≤39	37.0	97.4	50.7	37.6:1
≤44	49.6	94.1	65.7	15.9:1
≤49	60.7	91.0	77.7	10.1:1
≤54	70.8	87.1	86.7	6.7:1
≤59	80.0	83.0	93.5	4.9:1
≤64	87.7	78.9	97.3	3.7:1
≤69	94.1	75.1	99.4	3.0:1
≤74	97.4	72.9	100.0	2.7:1
≤79	98.9	71.8	100.0	2.5:1
≤84	99.7	71.3	100.0	2.5:1
≤89	99.9	71.1	100.0	2.5:1
≤94	100.0	71.1	100.0	2.5:1
≤100	100.0	71.1	100.0	2.5:1

Tables for
the World-Bank-Definition
Median Poverty Line

Figure 3 (World-Bank-definition median line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	96.0
5–9	84.9
10–14	71.8
15–19	41.4
20–24	31.7
25–29	23.3
30–34	15.3
35–39	6.0
40–44	2.9
45–49	0.8
50–54	0.0
55–59	0.0
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (World-Bank-definition median line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n =$ 16,384, 2011 scorecard applied to the 2011 validation sample

		Difference between estimate and true value		
		Confidence interval (±percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	−4.0	2.0	2.0	2.0
5–9	−4.2	5.1	5.7	7.7
10–14	+22.8	7.3	8.3	11.0
15–19	−15.2	9.3	9.7	10.6
20–24	+2.5	3.2	3.8	4.9
25–29	+0.4	2.0	2.4	3.0
30–34	+5.0	1.3	1.6	2.1
35–39	−1.3	1.1	1.3	1.5
40–44	+0.1	0.6	0.7	0.9
45–49	−1.0	0.8	0.8	0.9
50–54	−0.4	0.3	0.3	0.4
55–59	+0.0	0.0	0.0	0.0
60–64	+0.0	0.0	0.0	0.0
65–69	+0.0	0.0	0.0	0.0
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (World-Bank-definition median line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Difference between estimate and true value			
	Diff.	Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+0.1	40.9	56.2	69.3
4	−0.0	21.6	27.6	39.4
8	+0.2	15.2	18.4	25.1
16	+0.2	10.9	13.0	16.5
32	−0.0	7.8	9.4	12.0
64	−0.0	5.6	6.7	8.7
128	+0.0	3.9	4.5	6.1
256	−0.0	2.7	3.2	4.4
512	+0.0	1.9	2.3	3.0
1,024	+0.0	1.4	1.6	2.2
2,048	+0.0	1.0	1.2	1.6
4,096	+0.0	0.7	0.8	1.0
8,192	+0.0	0.5	0.6	0.7
16,384	−0.0	0.3	0.4	0.5

Figure 11 (World-Bank-definition median line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	8.0	0.0	91.9	92.0	−97.9
≤9	0.6	7.5	0.1	91.9	92.4	−85.0
≤14	0.9	7.1	0.4	91.5	92.4	−71.5
≤19	2.6	5.5	1.7	90.2	92.8	−15.1
≤24	3.7	4.4	4.7	87.2	90.9	+41.5
≤29	5.6	2.5	10.7	81.2	86.8	−32.6
≤34	6.6	1.5	18.8	73.1	79.7	−133.4
≤39	7.4	0.7	29.6	62.3	69.7	−266.4
≤44	7.8	0.3	41.8	50.1	57.9	−417.8
≤49	8.0	0.0	52.7	39.3	47.3	−552.0
≤54	8.1	0.0	62.7	29.2	37.3	−676.1
≤59	8.1	0.0	71.9	20.0	28.1	−790.7
≤64	8.1	0.0	79.6	12.3	20.4	−885.8
≤69	8.1	0.0	86.0	5.9	14.0	−964.7
≤74	8.1	0.0	89.4	2.6	10.6	−1,006.4
≤79	8.1	0.0	90.9	1.1	9.1	−1,025.1
≤84	8.1	0.0	91.6	0.3	8.4	−1,034.2
≤89	8.1	0.0	91.8	0.1	8.2	−1,037.0
≤94	8.1	0.0	91.9	0.0	8.1	−1,038.3
≤100	8.1	0.0	91.9	0.0	8.1	−1,038.3

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (World-Bank-definition median line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	1.1	Only poor targeted
≤9	0.6	89.0	7.1	8.1:1
≤14	1.4	67.5	11.5	2.1:1
≤19	4.3	60.5	32.0	1.5:1
≤24	8.4	44.0	46.0	0.8:1
≤29	16.3	34.3	69.3	0.5:1
≤34	25.4	25.9	81.5	0.3:1
≤39	37.0	20.0	91.9	0.3:1
≤44	49.6	15.7	96.6	0.2:1
≤49	60.7	13.2	99.4	0.2:1
≤54	70.8	11.4	100.0	0.1:1
≤59	80.0	10.1	100.0	0.1:1
≤64	87.7	9.2	100.0	0.1:1
≤69	94.1	8.6	100.0	0.1:1
≤74	97.4	8.3	100.0	0.1:1
≤79	98.9	8.2	100.0	0.1:1
≤84	99.7	8.1	100.0	0.1:1
≤89	99.9	8.1	100.0	0.1:1
≤94	100.0	8.1	100.0	0.1:1
≤100	100.0	8.1	100.0	0.1:1

Tables for
the World-Bank-Definition
$1.25/day 2005 PPP Line

Figure 3 (World-Bank-definition $1.25/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	42.0
5–9	42.0
10–14	17.4
15–19	10.1
20–24	9.3
25–29	7.5
30–34	4.1
35–39	0.4
40–44	0.2
45–49	0.1
50–54	0.0
55–59	0.0
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (World-Bank-definition $1.25/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

Score	Diff.	Difference between estimate and true value Confidence interval ($\pm$percentage points) 90-percent	95-percent	99-percent
0–4	+42.0	0.0	0.0	0.0
5–9	−0.4	9.3	10.8	14.5
10–14	−6.2	6.5	7.8	10.0
15–19	−17.9	10.6	10.9	11.5
20–24	−3.7	2.9	3.1	3.5
25–29	+1.1	1.2	1.4	1.9
30–34	+0.7	0.8	1.0	1.4
35–39	+0.4	0.0	0.0	0.0
40–44	+0.2	0.0	0.0	0.0
45–49	+0.1	0.0	0.0	0.0
50–54	+0.0	0.0	0.0	0.0
55–59	+0.0	0.0	0.0	0.0
60–64	+0.0	0.0	0.0	0.0
65–69	+0.0	0.0	0.0	0.0
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (World-Bank-definition $1.25/day line):
Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Diff.	Difference between estimate and true value Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	−0.8	4.7	48.2	54.5
4	−0.5	14.7	17.3	25.6
8	−0.4	8.7	10.9	18.3
16	−0.5	6.4	7.9	11.8
32	−0.5	4.6	5.6	8.1
64	−0.4	3.5	4.3	6.1
128	−0.5	2.4	3.0	3.9
256	−0.5	1.8	2.1	2.9
512	−0.5	1.3	1.5	2.0
1,024	−0.5	0.9	1.0	1.4
2,048	−0.5	0.6	0.8	1.0
4,096	−0.5	0.4	0.5	0.7
8,192	−0.5	0.3	0.4	0.5
16,384	−0.5	0.2	0.3	0.3

Figure 11 (World-Bank-definition $1.25/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.0	2.6	0.1	97.3	97.3	−96.7
≤9	0.2	2.4	0.4	97.0	97.1	−67.8
≤14	0.4	2.2	1.0	96.4	96.8	−32.4
≤19	1.2	1.4	3.0	94.4	95.6	−16.4
≤24	1.8	0.8	6.7	90.7	92.5	−156.2
≤29	2.3	0.3	14.0	83.4	85.7	−438.9
≤34	2.6	0.0	22.8	74.6	77.2	−777.3
≤39	2.6	0.0	34.4	63.0	65.6	−1,222.2
≤44	2.6	0.0	47.0	50.4	53.0	−1,706.7
≤49	2.6	0.0	58.1	39.3	41.9	−2,131.6
≤54	2.6	0.0	68.1	29.2	31.9	−2,518.7
≤59	2.6	0.0	77.4	20.0	22.6	−2,874.3
≤64	2.6	0.0	85.1	12.3	14.9	−3,169.6
≤69	2.6	0.0	91.5	5.9	8.5	−3,414.4
≤74	2.6	0.0	94.8	2.6	5.2	−3,543.8
≤79	2.6	0.0	96.3	1.1	3.7	−3,601.8
≤84	2.6	0.0	97.1	0.3	2.9	−3,630.0
≤89	2.6	0.0	97.3	0.1	2.7	−3,638.5
≤94	2.6	0.0	97.4	0.0	2.6	−3,642.7
≤100	2.6	0.0	97.4	0.0	2.6	−3,642.7

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (World-Bank-definition $1.25/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	0.0	0.0	0.0:1
≤9	0.6	30.4	7.5	0.4:1
≤14	1.4	27.8	14.7	0.4:1
≤19	4.3	29.1	47.8	0.4:1
≤24	8.4	21.0	68.3	0.3:1
≤29	16.3	14.0	87.9	0.2:1
≤34	25.4	10.2	100.0	0.1:1
≤39	37.0	7.0	100.0	0.1:1
≤44	49.6	5.2	100.0	0.1:1
≤49	60.7	4.3	100.0	0.0:1
≤54	70.8	3.7	100.0	0.0:1
≤59	80.0	3.3	100.0	0.0:1
≤64	87.7	3.0	100.0	0.0:1
≤69	94.1	2.8	100.0	0.0:1
≤74	97.4	2.7	100.0	0.0:1
≤79	98.9	2.6	100.0	0.0:1
≤84	99.7	2.6	100.0	0.0:1
≤89	99.9	2.6	100.0	0.0:1
≤94	100.0	2.6	100.0	0.0:1
≤100	100.0	2.6	100.0	0.0:1

Tables for
the World-Bank-Definition
$2.00/day 2005 PPP Line

Figure 3 (World-Bank-definition $2.00/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	95.6
10–14	91.5
15–19	77.5
20–24	62.0
25–29	52.5
30–34	39.4
35–39	24.6
40–44	14.8
45–49	8.4
50–54	1.9
55–59	1.0
60–64	0.5
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (World-Bank-definition $2.00/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

| | | Difference between estimate and true value | | |
| | | Confidence interval (±percentage points) | | |
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	−4.4	2.2	2.2	2.2
10–14	+16.1	6.6	8.1	10.3
15–19	−16.7	9.2	9.3	9.5
20–24	−4.7	3.9	4.1	4.5
25–29	+7.1	2.4	2.8	3.8
30–34	+7.8	2.1	2.6	3.4
35–39	+2.5	1.6	1.8	2.4
40–44	+3.6	1.1	1.4	1.9
45–49	+1.2	1.0	1.2	1.5
50–54	−0.5	0.6	0.7	0.9
55–59	+0.2	0.4	0.4	0.6
60–64	+0.2	0.2	0.3	0.4
65–69	−0.7	0.6	0.6	0.7
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (World-Bank-definition \$2.00/day line):
Average differences between estimated poverty rates
and true values for a group at a point in time, with
confidence intervals, for 1,000 bootstraps of various
sample sizes, 2011 scorecard applied to the 2011
validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (±percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+2.2	63.9	68.9	76.8
4	+1.8	29.4	35.3	43.5
8	+2.0	20.7	24.0	31.8
16	+1.9	14.5	17.2	22.2
32	+1.4	10.6	12.1	15.0
64	+1.4	7.4	8.8	11.4
128	+1.7	5.0	6.1	7.7
256	+1.6	3.5	4.2	5.3
512	+1.6	2.5	2.9	3.9
1,024	+1.6	1.8	2.2	3.0
2,048	+1.6	1.2	1.4	2.0
4,096	+1.6	0.9	1.0	1.3
8,192	+1.6	0.6	0.7	1.0
16,384	+1.6	0.5	0.5	0.7

Figure 11 (World-Bank-definition $2.00/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	18.7	0.0	81.2	81.3	−99.1
≤9	0.6	18.1	0.0	81.2	81.9	−93.2
≤14	1.2	17.6	0.2	81.1	82.3	−86.2
≤19	3.9	14.9	0.4	80.9	84.8	−56.4
≤24	6.7	12.1	1.8	79.4	86.1	−19.5
≤29	10.2	8.6	6.1	75.1	85.4	+41.3
≤34	13.3	5.5	12.1	69.1	82.4	+35.5
≤39	15.8	2.9	21.2	60.1	75.9	−12.7
≤44	17.4	1.4	32.3	49.0	66.3	−71.8
≤49	18.3	0.5	42.4	38.8	57.1	−125.8
≤54	18.6	0.2	52.2	29.1	47.6	−177.8
≤59	18.7	0.1	61.3	19.9	38.6	−226.5
≤64	18.7	0.0	69.0	12.3	31.0	−267.2
≤69	18.8	0.0	75.3	5.9	24.7	−300.8
≤74	18.8	0.0	78.6	2.6	21.4	−318.8
≤79	18.8	0.0	80.2	1.1	19.8	−326.8
≤84	18.8	0.0	80.9	0.3	19.1	−330.7
≤89	18.8	0.0	81.1	0.1	18.9	−331.9
≤94	18.8	0.0	81.2	0.0	18.8	−332.5
≤100	18.8	0.0	81.2	0.0	18.8	−332.5

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (World-Bank-definition $2.00/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.5	Only poor targeted
≤9	0.6	100.0	3.4	Only poor targeted
≤14	1.4	88.1	6.5	7.4:1
≤19	4.3	91.6	20.8	10.8:1
≤24	8.4	78.9	35.5	3.7:1
≤29	16.3	62.7	54.5	1.7:1
≤34	25.4	52.4	70.9	1.1:1
≤39	37.0	42.8	84.4	0.7:1
≤44	49.6	35.0	92.4	0.5:1
≤49	60.7	30.1	97.3	0.4:1
≤54	70.8	26.3	99.0	0.4:1
≤59	80.0	23.4	99.5	0.3:1
≤64	87.7	21.4	99.7	0.3:1
≤69	94.1	20.0	100.0	0.2:1
≤74	97.4	19.3	100.0	0.2:1
≤79	98.9	19.0	100.0	0.2:1
≤84	99.7	18.8	100.0	0.2:1
≤89	99.9	18.8	100.0	0.2:1
≤94	100.0	18.8	100.0	0.2:1
≤100	100.0	18.8	100.0	0.2:1

Tables for
the World-Bank-Definition
$2.50/day 2005 PPP Line

Figure 3 (World-Bank-definition $2.50/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	95.9
10–14	92.1
15–19	92.1
20–24	91.9
25–29	79.4
30–34	73.7
35–39	55.0
40–44	43.1
45–49	25.2
50–54	15.9
55–59	5.3
60–64	1.0
65–69	0.6
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (World-Bank-definition $2.50/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2011 validation sample

| | | Difference between estimate and true value | | |
| | | Confidence interval (±percentage points) | | |
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	−4.1	2.0	2.0	2.0
10–14	+8.7	6.1	7.1	9.5
15–19	−6.1	3.5	3.5	3.7
20–24	+5.8	2.2	2.5	3.2
25–29	+2.4	1.9	2.4	3.3
30–34	+9.0	2.1	2.5	3.2
35–39	+0.1	2.0	2.3	2.9
40–44	+10.8	1.7	2.1	2.7
45–49	−7.8	4.8	5.0	5.5
50–54	+4.9	1.2	1.4	1.9
55–59	−0.9	1.1	1.3	1.7
60–64	−4.4	2.7	2.9	3.0
65–69	−4.6	2.9	3.0	3.4
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (World-Bank-definition \$2.50/day line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (±percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+1.1	74.3	79.4	95.5
4	+1.6	35.5	40.7	51.1
8	+2.3	23.9	27.5	33.7
16	+1.8	16.9	21.2	26.6
32	+1.6	12.6	14.9	19.5
64	+1.5	8.1	10.0	12.9
128	+1.8	6.1	7.2	9.0
256	+1.8	4.3	5.1	6.8
512	+1.7	3.0	3.5	4.7
1,024	+1.8	2.1	2.6	3.3
2,048	+1.8	1.5	1.8	2.3
4,096	+1.8	1.0	1.2	1.6
8,192	+1.8	0.7	0.9	1.1
16,384	+1.7	0.5	0.6	0.8

Figure 11 (World-Bank-definition $2.50/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	36.7	0.0	63.2	63.3	−99.5
≤9	0.6	36.1	0.0	63.2	63.9	−96.5
≤14	1.3	35.5	0.1	63.1	64.4	−92.8
≤19	4.1	32.7	0.2	63.1	67.2	−77.2
≤24	7.6	29.1	0.8	62.4	70.1	−56.2
≤29	13.8	23.0	2.5	60.7	74.4	−18.2
≤34	19.8	16.9	5.6	57.6	77.5	+23.1
≤39	26.3	10.4	10.7	52.5	78.9	+70.9
≤44	30.6	6.2	19.0	44.2	74.8	+48.3
≤49	34.3	2.5	26.4	36.9	71.2	+28.3
≤54	35.5	1.2	35.2	28.0	63.5	+4.2
≤59	36.1	0.7	43.9	19.3	55.4	−19.5
≤64	36.5	0.3	51.2	12.0	48.5	−39.3
≤69	36.8	0.0	57.3	5.9	42.7	−55.8
≤74	36.8	0.0	60.7	2.6	39.3	−64.9
≤79	36.8	0.0	62.2	1.1	37.8	−69.0
≤84	36.8	0.0	62.9	0.3	37.1	−71.0
≤89	36.8	0.0	63.1	0.1	36.9	−71.6
≤94	36.8	0.0	63.2	0.0	36.8	−71.9
≤100	36.8	0.0	63.2	0.0	36.8	−71.9

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (World-Bank-definition \$2.50/day line): Share of all households who are targeted (that is, score at or below a cutoff), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.2	Only poor targeted
≤9	0.6	100.0	1.7	Only poor targeted
≤14	1.4	93.0	3.5	13.2:1
≤19	4.3	96.2	11.2	25.5:1
≤24	8.4	90.5	20.8	9.5:1
≤29	16.3	84.4	37.4	5.4:1
≤34	25.4	78.0	53.9	3.5:1
≤39	37.0	71.1	71.6	2.5:1
≤44	49.6	61.7	83.3	1.6:1
≤49	60.7	56.5	93.3	1.3:1
≤54	70.8	50.2	96.6	1.0:1
≤59	80.0	45.1	98.1	0.8:1
≤64	87.7	41.6	99.1	0.7:1
≤69	94.1	39.1	100.0	0.6:1
≤74	97.4	37.7	100.0	0.6:1
≤79	98.9	37.2	100.0	0.6:1
≤84	99.7	36.9	100.0	0.6:1
≤89	99.9	36.8	100.0	0.6:1
≤94	100.0	36.8	100.0	0.6:1
≤100	100.0	36.8	100.0	0.6:1

Tables for
the World-Bank-Definition
$5.00/day 2005 PPP Line

Figure 3 (World-Bank-definition $5.00/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	100.0
10–14	100.0
15–19	100.0
20–24	100.0
25–29	99.5
30–34	99.5
35–39	99.5
40–44	98.6
45–49	93.1
50–54	89.2
55–59	72.2
60–64	67.3
65–69	49.8
70–74	25.7
75–79	19.6
80–84	15.3
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (World-Bank-definition $5.00/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

Score	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	+0.0	0.0	0.0	0.0
20–24	+0.0	0.0	0.0	0.0
25–29	+0.7	0.5	0.6	0.9
30–34	−0.5	0.3	0.3	0.3
35–39	+1.1	0.5	0.6	0.8
40–44	+6.7	1.2	1.4	1.8
45–49	+1.4	1.2	1.4	1.8
50–54	+2.7	1.4	1.7	2.1
55–59	−6.2	3.9	4.2	4.4
60–64	−6.0	4.0	4.2	4.4
65–69	−6.3	4.6	4.8	5.3
70–74	−18.8	11.3	11.6	12.3
75–79	+9.9	3.1	3.7	4.7
80–84	−18.9	13.6	14.3	15.6
85–89	−15.2	13.7	14.9	17.5
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (World-Bank-definition $5.00/day line):
Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Difference between estimate and true value			
	Diff.	Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+0.0	61.2	69.7	86.4
4	−0.1	24.6	29.8	44.1
8	+0.3	17.2	21.3	27.7
16	−0.0	12.4	14.5	18.6
32	−0.1	9.2	10.7	14.4
64	−0.2	6.0	7.1	10.2
128	−0.3	4.2	5.1	6.6
256	−0.2	3.1	3.7	4.9
512	−0.2	2.2	2.6	3.3
1,024	−0.2	1.6	1.9	2.4
2,048	−0.2	1.1	1.3	1.6
4,096	−0.2	0.8	0.9	1.2
8,192	−0.2	0.5	0.6	0.8
16,384	−0.2	0.4	0.5	0.6

Figure 11 (World-Bank-definition $5.00/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	84.6	0.0	15.3	15.4	−99.8
≤9	0.6	84.1	0.0	15.3	15.9	−98.5
≤14	1.4	83.3	0.0	15.3	16.7	−96.8
≤19	4.3	80.4	0.0	15.3	19.6	−89.9
≤24	8.4	76.3	0.0	15.3	23.7	−80.1
≤29	16.2	68.5	0.1	15.2	31.4	−61.6
≤34	25.3	59.4	0.1	15.2	40.6	−40.1
≤39	36.8	47.9	0.3	15.0	51.8	−12.9
≤44	48.6	36.1	1.1	14.2	62.8	+15.9
≤49	58.8	25.9	1.9	13.4	72.3	+41.1
≤54	67.4	17.3	3.4	11.9	79.3	+63.1
≤59	74.5	10.2	5.5	9.8	84.3	+82.4
≤64	79.8	4.9	7.9	7.4	87.1	+90.6
≤69	83.1	1.6	10.9	4.3	87.5	+87.1
≤74	84.3	0.4	13.1	2.2	86.5	+84.5
≤79	84.5	0.2	14.4	0.9	85.4	+83.0
≤84	84.7	0.0	15.0	0.3	85.0	+82.3
≤89	84.7	0.0	15.2	0.1	84.8	+82.1
≤94	84.7	0.0	15.3	0.0	84.7	+81.9
≤100	84.7	0.0	15.3	0.0	84.7	+81.9

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (World-Bank-definition $5.00/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.1	Only poor targeted
≤9	0.6	100.0	0.8	Only poor targeted
≤14	1.4	100.0	1.6	Only poor targeted
≤19	4.3	100.0	5.0	Only poor targeted
≤24	8.4	100.0	10.0	Only poor targeted
≤29	16.3	99.5	19.2	186.7:1
≤34	25.4	99.7	29.9	291.7:1
≤39	37.0	99.3	43.4	145.8:1
≤44	49.6	97.9	57.3	45.6:1
≤49	60.7	96.9	69.4	31.8:1
≤54	70.8	95.3	79.6	20.1:1
≤59	80.0	93.1	87.9	13.5:1
≤64	87.7	91.0	94.2	10.1:1
≤69	94.1	88.4	98.1	7.6:1
≤74	97.4	86.6	99.6	6.4:1
≤79	98.9	85.4	99.8	5.9:1
≤84	99.7	85.0	100.0	5.6:1
≤89	99.9	84.8	100.0	5.6:1
≤94	100.0	84.7	100.0	5.5:1
≤100	100.0	84.7	100.0	5.5:1

Tables for
100% of the Old-Definition
National Poverty Line

(and Tables Pertaining
to All Old-Definition Lines)

Figure 3 (100% of the old-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	87.6
5–9	57.8
10–14	51.5
15–19	40.7
20–24	30.4
25–29	20.8
30–34	14.5
35–39	8.4
40–44	4.9
45–49	3.4
50–54	1.1
55–59	0.5
60–64	0.4
65–69	0.2
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 4 (100% of the old-definition national line): Derivation of estimated poverty likelihoods associated with scores

Score	Households at score and < poverty line		All households at score		Poverty likelihood (%)
0–4	46	÷	53	=	87.6
5–9	527	÷	912	=	57.8
10–14	1,171	÷	2,274	=	51.5
15–19	1,600	÷	3,930	=	40.7
20–24	2,196	÷	7,215	=	30.4
25–29	2,107	÷	10,147	=	20.8
30–34	1,634	÷	11,308	=	14.5
35–39	1,006	÷	11,913	=	8.4
40–44	656	÷	13,301	=	4.9
45–49	364	÷	10,702	=	3.4
50–54	97	÷	9,144	=	1.1
55–59	31	÷	6,681	=	0.5
60–64	21	÷	4,768	=	0.4
65–69	6	÷	3,358	=	0.2
70–74	0	÷	2,094	=	0.0
75–79	0	÷	1,206	=	0.0
80–84	0	÷	683	=	0.0
85–89	0	÷	152	=	0.0
90–94	0	÷	143	=	0.0
95–100	0	÷	16	=	0.0

Number of all households normalized to sum to 100,000.

Figure 6 (100% of the old-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2009 validation sample

Score	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
0–4	+5.4	21.0	24.2	31.3
5–9	−5.8	6.5	7.6	10.4
10–14	+2.4	4.4	5.1	6.5
15–19	−2.5	3.4	4.0	5.4
20–24	−4.5	3.4	3.7	4.3
25–29	−4.0	2.9	3.1	3.5
30–34	+1.0	1.3	1.6	2.2
35–39	−0.6	1.1	1.3	1.7
40–44	−0.1	0.8	1.0	1.2
45–49	−0.1	0.8	0.9	1.2
50–54	+0.7	0.2	0.3	0.4
55–59	−0.0	0.3	0.4	0.5
60–64	+0.4	0.0	0.0	0.0
65–69	+0.2	0.0	0.0	0.0
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (100% of the old-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2009 validation sample

Sample Size n	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	−0.6	54.8	63.1	75.2
4	−0.9	24.2	28.7	39.8
8	−0.9	16.8	20.7	27.3
16	−0.7	12.6	15.3	19.3
32	−0.9	8.7	10.2	13.2
64	−0.9	6.6	7.7	10.5
128	−0.8	4.6	5.5	7.1
256	−0.8	3.1	3.7	4.8
512	−0.8	2.2	2.5	3.4
1,024	−0.8	1.5	1.7	2.4
2,048	−0.7	1.1	1.3	1.7
4,096	−0.7	0.7	0.9	1.1
8,192	−0.7	0.5	0.6	0.8
16,384	−0.7	0.4	0.5	0.6

Tables for

150% of the Old-Definition National Poverty Line

Figure 3 (150% of the old-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	91.4
10–14	89.6
15–19	80.3
20–24	74.8
25–29	66.4
30–34	51.9
35–39	43.3
40–44	28.4
45–49	21.5
50–54	12.0
55–59	5.9
60–64	2.8
65–69	1.2
70–74	0.2
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (150% of the old-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2009 validation sample

| | | Difference between estimate and true value | | |
| | | Confidence interval ($\pm$percentage points) | | |
Score	Diff.	90-percent	95-percent	99-percent
0–4	+17.8	21.0	24.2	31.3
5–9	−1.9	3.3	3.9	5.0
10–14	+5.4	3.1	3.7	4.8
15–19	+0.9	2.8	3.2	4.2
20–24	+0.8	2.2	2.7	3.7
25–29	+0.6	1.9	2.3	3.1
30–34	−1.2	1.8	2.2	3.0
35–39	+2.6	1.8	2.2	2.9
40–44	+0.5	1.7	1.9	2.6
45–49	+2.3	1.6	2.0	2.5
50–54	+0.5	1.4	1.8	2.3
55–59	−1.6	1.5	1.7	2.0
60–64	+0.7	0.8	0.9	1.3
65–69	+0.2	0.7	0.8	1.1
70–74	+0.2	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (150% of the old-definition national line):
Average differences between estimated poverty rates
and true values for a group at a point in time, with
confidence intervals, for 1,000 bootstraps of various
sample sizes, 2011 scorecard applied to the 2009
validation sample

Sample Size n	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	−0.5	69.0	76.6	88.8
4	+0.3	33.4	38.5	51.8
8	+0.7	25.0	29.4	36.8
16	+0.8	16.6	19.5	28.5
32	+0.6	11.8	14.3	19.1
64	+0.7	8.4	10.1	13.5
128	+0.8	6.2	7.2	9.2
256	+0.8	4.2	4.9	6.3
512	+0.7	2.9	3.5	4.7
1,024	+0.7	2.0	2.5	3.2
2,048	+0.7	1.5	1.7	2.3
4,096	+0.7	1.1	1.3	1.7
8,192	+0.7	0.7	0.9	1.2
16,384	+0.7	0.5	0.7	0.8

Tables for

200% of the Old-Definition National Poverty Line

Figure 3 (200% of the old-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	99.7
10–14	98.7
15–19	95.0
20–24	92.4
25–29	87.8
30–34	78.0
35–39	74.3
40–44	58.6
45–49	48.5
50–54	32.7
55–59	21.8
60–64	12.0
65–69	3.9
70–74	2.3
75–79	0.4
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (200% of the old-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2009 validation sample

Score	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.9	1.3	1.5	1.7
10–14	+2.3	1.5	1.8	2.5
15–19	+1.3	1.5	1.8	2.6
20–24	−2.4	1.7	1.8	2.0
25–29	+0.4	1.3	1.5	2.0
30–34	−3.5	2.5	2.7	2.9
35–39	+1.5	1.8	2.0	2.6
40–44	+2.7	1.8	2.2	3.1
45–49	+3.3	2.1	2.4	3.0
50–54	−0.7	2.1	2.5	3.1
55–59	−0.7	2.0	2.5	3.2
60–64	+4.2	1.5	1.8	2.6
65–69	−1.7	1.7	1.9	2.4
70–74	−1.9	1.9	2.1	2.7
75–79	+0.4	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (200% of the old-definition national line):
Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2009 validation sample

Sample Size n	Difference between estimate and true value			
		Confidence interval (±percentage points)		
	Diff.	90-percent	95-percent	99-percent
1	+0.6	62.9	72.7	90.2
4	+0.4	32.1	37.7	52.1
8	+0.4	22.6	26.7	34.5
16	+0.6	15.8	18.5	23.1
32	+0.6	11.2	13.2	17.5
64	+0.7	8.1	10.0	13.2
128	+0.5	5.9	7.3	9.1
256	+0.5	4.1	4.8	6.4
512	+0.4	3.0	3.5	4.9
1,024	+0.4	2.0	2.3	3.3
2,048	+0.5	1.4	1.7	2.3
4,096	+0.5	1.1	1.3	1.7
8,192	+0.5	0.8	0.9	1.2
16,384	+0.5	0.6	0.7	0.9

Tables for

The Old-Definition $1.25/day 2005 PPP Poverty Line

Figure 3 (Old-definition $1.25/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	73.5
5–9	32.0
10–14	30.3
15–19	21.2
20–24	14.2
25–29	9.7
30–34	5.4
35–39	2.3
40–44	1.6
45–49	0.9
50–54	0.3
55–59	0.2
60–64	0.2
65–69	0.1
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (Old-definition $1.25/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2009 validation sample

| Score | Diff. | Difference between estimate and true value | | |
| | | Confidence interval ($\pm$percentage points) | | |
		90-percent	95-percent	99-percent
0–4	−8.7	21.0	24.2	31.3
5–9	−7.3	7.1	7.9	11.3
10–14	+1.5	3.8	4.5	6.1
15–19	−1.3	2.7	3.3	4.4
20–24	+0.6	1.7	2.0	2.8
25–29	−0.3	1.3	1.5	1.9
30–34	+1.3	0.8	0.9	1.2
35–39	−0.4	0.6	0.7	1.0
40–44	−0.0	0.4	0.5	0.7
45–49	+0.1	0.4	0.4	0.6
50–54	+0.1	0.2	0.2	0.2
55–59	+0.2	0.0	0.0	0.0
60–64	+0.2	0.0	0.0	0.0
65–69	+0.1	0.0	0.0	0.0
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (Old-definition $1.25/day line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2009 validation sample

Sample Size n	Difference between estimate and true value			
	Diff.	Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	−0.5	41.9	58.1	64.9
4	−0.4	16.0	19.2	29.9
8	−0.3	12.1	14.9	21.0
16	+0.1	8.6	10.7	13.7
32	−0.1	5.9	7.2	9.0
64	+0.0	4.3	5.1	7.1
128	+0.0	3.0	3.6	4.7
256	+0.0	2.1	2.5	3.1
512	+0.0	1.6	1.8	2.3
1,024	+0.1	1.1	1.3	1.7
2,048	+0.1	0.8	0.9	1.2
4,096	+0.1	0.5	0.7	0.9
8,192	+0.1	0.4	0.5	0.6
16,384	+0.1	0.3	0.3	0.4

Tables for

The Old-Definition \$2.50/day 2005 PPP Poverty Line

Figure 3 (Old-definition $2.50/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	94.5
10–14	94.5
15–19	85.0
20–24	80.0
25–29	75.2
30–34	62.0
35–39	54.1
40–44	37.5
45–49	27.5
50–54	18.4
55–59	10.4
60–64	5.6
65–69	1.7
70–74	0.8
75–79	0.2
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (Old-definition \$2.50/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2009 validation sample

Score	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
0–4	+17.8	21.0	24.2	31.3
5–9	+1.2	3.3	3.9	5.0
10–14	+5.8	2.6	3.1	4.2
15–19	+2.2	2.6	3.1	4.1
20–24	−2.4	2.1	2.4	2.9
25–29	+1.2	1.8	2.2	2.7
30–34	−2.2	2.0	2.3	2.9
35–39	+0.7	1.8	2.1	2.8
40–44	−0.3	1.8	2.2	2.8
45–49	+0.2	1.8	2.1	2.7
50–54	+0.9	1.8	2.2	2.8
55–59	+0.5	1.5	1.8	2.2
60–64	+1.0	1.2	1.4	1.8
65–69	+0.1	0.9	1.0	1.3
70–74	+0.8	0.0	0.0	0.0
75–79	+0.2	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (Old-definition \$2.50/day line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2009 validation sample

Sample Size n	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	−0.7	68.8	76.3	92.0
4	+0.2	33.2	40.8	51.0
8	+0.2	25.0	29.0	38.7
16	+0.2	17.2	20.8	28.1
32	+0.1	11.9	14.6	21.0
64	+0.2	8.9	10.4	14.2
128	+0.1	6.3	7.1	9.0
256	+0.2	4.3	5.1	6.6
512	+0.2	2.9	3.6	4.6
1,024	+0.2	2.1	2.5	3.4
2,048	+0.2	1.5	1.8	2.5
4,096	+0.2	1.1	1.3	1.8
8,192	+0.2	0.8	0.9	1.3
16,384	+0.2	0.6	0.7	0.9

Tables for
100% of the Government-Definition
National Poverty Line

(and Tables Pertaining
to All Government-Definition Lines)

Figure 3 (100% of the government-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	91.9
10–14	74.5
15–19	59.8
20–24	50.5
25–29	41.4
30–34	29.7
35–39	21.0
40–44	9.3
45–49	7.9
50–54	4.7
55–59	3.2
60–64	1.3
65–69	1.1
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 4 (100% of the government-definition national line): Derivation of estimated poverty likelihoods associated with scores

Score	Households at score and < poverty line		All households at score		Poverty likelihood (%)
0–4	88	÷	88	=	100.0
5–9	525	÷	571	=	91.9
10–14	559	÷	750	=	74.5
15–19	1,772	÷	2,964	=	59.8
20–24	2,132	÷	4,225	=	50.5
25–29	3,285	÷	7,938	=	41.4
30–34	2,747	÷	9,242	=	29.7
35–39	2,460	÷	11,717	=	21.0
40–44	1,173	÷	12,552	=	9.3
45–49	865	÷	10,973	=	7.9
50–54	469	÷	10,010	=	4.7
55–59	298	÷	9,202	=	3.2
60–64	102	÷	7,601	=	1.3
65–69	71	÷	6,340	=	1.1
70–74	0	÷	3,327	=	0.0
75–79	0	÷	1,475	=	0.0
80–84	0	÷	707	=	0.0
85–89	0	÷	215	=	0.0
90–94	0	÷	103	=	0.0
95–100	0	÷	0	=	0.0

Number of all households normalized to sum to 100,000.

Figure 6 (100% of the government-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

Score	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.4	4.3	5.2	6.3
10–14	−1.0	6.6	7.9	10.9
15–19	−17.3	10.2	10.4	11.0
20–24	−0.0	3.2	3.8	5.1
25–29	+9.4	2.1	2.5	3.1
30–34	+7.4	1.7	2.1	3.1
35–39	+3.5	1.5	1.8	2.4
40–44	+2.1	0.9	1.1	1.3
45–49	+1.2	0.9	1.1	1.4
50–54	−1.2	1.1	1.1	1.4
55–59	+1.5	0.6	0.7	0.9
60–64	+0.5	0.3	0.4	0.5
65–69	−2.2	1.6	1.7	1.9
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (100% of the government-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+0.2	60.2	71.3	77.9
4	+1.4	28.1	33.8	46.4
8	+1.8	19.8	23.3	28.6
16	+1.7	13.7	15.9	21.5
32	+1.4	10.0	12.7	16.6
64	+1.6	7.2	8.4	11.4
128	+1.7	5.0	6.0	7.6
256	+1.8	3.4	4.2	5.3
512	+1.8	2.5	2.9	3.7
1,024	+1.8	1.7	2.0	2.5
2,048	+1.8	1.3	1.5	1.9
4,096	+1.8	0.9	1.1	1.4
8,192	+1.8	0.7	0.8	1.0
16,384	+1.8	0.5	0.6	0.7

Figure 11 (100% of the government-definition national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	15.8	0.0	84.1	84.2	−98.9
≤9	0.6	15.3	0.1	84.1	84.6	−92.1
≤14	1.2	14.7	0.2	83.9	85.1	−83.7
≤19	3.5	12.4	0.9	83.2	86.6	−50.7
≤24	5.6	10.3	3.0	81.1	86.7	−10.7
≤29	8.3	7.6	8.3	75.8	84.1	+47.9
≤34	10.5	5.4	15.3	68.8	79.4	+3.8
≤39	12.5	3.3	24.9	59.2	71.7	−57.1
≤44	13.7	2.2	36.3	47.8	61.5	−128.9
≤49	14.6	1.3	46.4	37.7	52.3	−192.2
≤54	15.4	0.5	55.6	28.5	43.9	−250.3
≤59	15.6	0.3	64.7	19.5	35.0	−307.1
≤64	15.7	0.2	72.2	12.0	27.6	−354.3
≤69	15.9	0.0	78.3	5.8	21.7	−392.9
≤74	15.9	0.0	81.6	2.5	18.4	−413.9
≤79	15.9	0.0	83.1	1.0	16.9	−423.2
≤84	15.9	0.0	83.8	0.3	16.2	−427.6
≤89	15.9	0.0	84.0	0.1	16.0	−429.0
≤94	15.9	0.0	84.1	0.0	15.9	−429.6
≤100	15.9	0.0	84.1	0.0	15.9	−429.6

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (100% of the government-definition national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.6	Only poor targeted
≤9	0.7	90.2	3.7	9.2:1
≤14	1.4	83.5	7.4	5.1:1
≤19	4.4	78.9	21.7	3.7:1
≤24	8.6	65.0	35.2	1.9:1
≤29	16.5	50.0	52.0	1.0:1
≤34	25.8	40.8	66.2	0.7:1
≤39	37.5	33.5	79.0	0.5:1
≤44	50.0	27.4	86.3	0.4:1
≤49	61.0	24.0	92.0	0.3:1
≤54	71.0	21.7	96.9	0.3:1
≤59	80.2	19.4	98.0	0.2:1
≤64	87.8	17.9	98.7	0.2:1
≤69	94.2	16.9	100.0	0.2:1
≤74	97.5	16.3	100.0	0.2:1
≤79	99.0	16.0	100.0	0.2:1
≤84	99.7	15.9	100.0	0.2:1
≤89	99.9	15.9	100.0	0.2:1
≤94	100.0	15.9	100.0	0.2:1
≤100	100.0	15.9	100.0	0.2:1

Tables for
150% of the Government-Definition
National Poverty Line

Figure 3 (150% of the government-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	97.8
10–14	95.8
15–19	95.8
20–24	94.8
25–29	87.3
30–34	80.5
35–39	66.4
40–44	54.0
45–49	41.6
50–54	35.8
55–59	24.1
60–64	17.5
65–69	9.3
70–74	4.2
75–79	1.1
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (150% of the government-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2011 validation sample

| Score | Diff. | Difference between estimate and true value | | |
| | | Confidence interval (±percentage points) | | |
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	−2.2	1.1	1.1	1.1
10–14	+12.3	6.2	7.3	9.5
15–19	−0.1	1.4	1.7	2.1
20–24	+10.5	2.3	2.8	3.6
25–29	+6.1	1.8	2.2	2.7
30–34	+12.7	1.9	2.3	3.2
35–39	−8.5	5.1	5.3	5.5
40–44	+7.3	1.9	2.3	2.9
45–49	−6.6	4.3	4.5	4.8
50–54	+6.3	1.9	2.2	2.9
55–59	+5.0	1.7	2.0	2.7
60–64	+0.4	1.8	2.2	3.1
65–69	−5.0	3.4	3.6	3.9
70–74	−3.6	2.8	3.0	3.5
75–79	−0.8	1.1	1.4	1.9
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (150% of the government-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size *n*	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+0.3	72.3	83.3	90.9
4	+2.3	37.1	44.1	55.4
8	+2.5	26.2	30.9	42.3
16	+2.5	19.5	22.7	30.6
32	+2.4	14.0	16.4	21.0
64	+2.4	9.9	11.3	13.8
128	+2.3	6.6	8.0	10.2
256	+2.3	4.8	5.7	7.4
512	+2.4	3.3	3.9	5.1
1,024	+2.3	2.4	2.8	3.4
2,048	+2.3	1.6	2.0	2.6
4,096	+2.3	1.1	1.3	1.8
8,192	+2.3	0.8	1.0	1.2
16,384	+2.3	0.6	0.7	0.8

Figure 11 (150% of the government-definition national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	49.4	0.0	50.5	50.6	−99.6
≤9	0.7	48.8	0.0	50.5	51.2	−97.3
≤14	1.3	48.2	0.1	50.4	51.7	−94.5
≤19	4.1	45.3	0.2	50.3	54.4	−82.8
≤24	7.7	41.7	0.9	49.7	57.4	−67.0
≤29	14.2	35.3	2.3	48.2	62.4	−37.8
≤34	20.7	28.8	5.1	45.4	66.1	−6.1
≤39	29.6	19.9	7.9	42.6	72.2	+35.6
≤44	35.8	13.7	14.3	36.2	72.0	+71.1
≤49	41.2	8.3	19.8	30.7	71.9	+60.0
≤54	44.6	4.9	26.5	24.1	68.6	+46.5
≤59	46.7	2.8	33.6	17.0	63.6	+32.2
≤64	48.1	1.4	39.7	10.8	58.9	+19.7
≤69	49.2	0.3	45.0	5.5	54.7	+9.0
≤74	49.4	0.1	48.1	2.4	51.9	+2.8
≤79	49.5	0.0	49.5	1.0	50.5	−0.1
≤84	49.5	0.0	50.2	0.3	49.8	−1.5
≤89	49.5	0.0	50.4	0.1	49.6	−1.9
≤94	49.5	0.0	50.5	0.0	49.5	−2.1
≤100	49.5	0.0	50.5	0.0	49.5	−2.1

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (150% of the government-definition national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.2	Only poor targeted
≤9	0.7	100.0	1.3	Only poor targeted
≤14	1.4	93.0	2.7	13.3:1
≤19	4.4	94.5	8.4	17.3:1
≤24	8.6	89.8	15.6	8.8:1
≤29	16.5	86.0	28.7	6.1:1
≤34	25.8	80.2	41.8	4.1:1
≤39	37.5	78.9	59.8	3.8:1
≤44	50.0	71.4	72.3	2.5:1
≤49	61.0	67.6	83.3	2.1:1
≤54	71.0	62.7	90.1	1.7:1
≤59	80.2	58.2	94.3	1.4:1
≤64	87.8	54.8	97.2	1.2:1
≤69	94.2	52.2	99.4	1.1:1
≤74	97.5	50.7	99.9	1.0:1
≤79	99.0	50.0	100.0	1.0:1
≤84	99.7	49.6	100.0	1.0:1
≤89	99.9	49.5	100.0	1.0:1
≤94	100.0	49.5	100.0	1.0:1
≤100	100.0	49.5	100.0	1.0:1

Tables for
200% of the Government-Definition
National Poverty Line

Figure 3 (200% of the government-definition national line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	100.0
10–14	100.0
15–19	100.0
20–24	100.0
25–29	96.0
30–34	95.1
35–39	92.3
40–44	86.5
45–49	75.0
50–54	68.9
55–59	54.2
60–64	49.6
65–69	34.4
70–74	18.7
75–79	12.2
80–84	9.2
85–89	8.8
90–94	6.8
95–100	0.0

Figure 6 (200% of the government-definition national line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

Score	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	+0.0	0.0	0.0	0.0
20–24	+5.7	1.4	1.7	2.3
25–29	+0.9	0.9	1.1	1.4
30–34	−0.5	0.8	1.0	1.3
35–39	+0.3	1.1	1.4	1.9
40–44	+6.7	1.6	1.9	2.5
45–49	+3.7	1.9	2.3	3.1
50–54	+1.0	2.0	2.4	3.1
55–59	−0.2	2.2	2.7	3.7
60–64	+2.8	2.5	3.0	4.1
65–69	+1.2	2.5	3.0	3.8
70–74	−18.7	11.3	11.7	12.5
75–79	−1.2	3.3	3.9	5.3
80–84	−13.1	10.0	10.8	12.5
85–89	−7.2	10.8	13.3	17.1
90–94	+6.8	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (200% of the government-definition national line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Diff.	Difference between estimate and true value		
		Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	−1.2	62.7	76.1	88.6
4	+0.5	30.5	37.0	50.2
8	+1.0	23.3	26.6	35.0
16	+1.5	16.7	19.5	25.5
32	+1.4	11.7	13.5	16.5
64	+1.4	8.2	9.8	13.0
128	+1.4	6.1	7.1	9.3
256	+1.5	4.0	4.8	6.8
512	+1.4	2.9	3.5	4.6
1,024	+1.4	2.0	2.4	3.1
2,048	+1.4	1.5	1.8	2.2
4,096	+1.4	1.0	1.1	1.5
8,192	+1.5	0.7	0.8	1.0
16,384	+1.5	0.5	0.6	0.8

Figure 11 (200% of the government-definition national line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	73.2	0.0	26.7	26.8	−99.8
≤9	0.7	72.6	0.0	26.7	27.4	−98.2
≤14	1.4	71.9	0.0	26.7	28.1	−96.2
≤19	4.4	68.9	0.0	26.7	31.1	−88.1
≤24	8.4	64.9	0.2	26.5	34.9	−76.8
≤29	15.9	57.4	0.7	26.1	42.0	−55.8
≤34	24.7	48.6	1.1	25.6	50.3	−31.2
≤39	35.5	37.8	2.0	24.7	60.2	−0.4
≤44	45.7	27.6	4.3	22.4	68.1	+30.7
≤49	53.7	19.6	7.3	19.4	73.1	+56.6
≤54	60.6	12.7	10.5	16.3	76.8	+79.6
≤59	65.8	7.5	14.4	12.3	78.1	+80.3
≤64	69.5	3.8	18.4	8.4	77.9	+74.9
≤69	71.8	1.5	22.4	4.3	76.1	+69.4
≤74	72.8	0.4	24.7	2.1	74.9	+66.4
≤79	73.1	0.2	25.9	0.9	74.0	+64.7
≤84	73.2	0.0	26.4	0.3	73.5	+63.9
≤89	73.3	0.0	26.6	0.1	73.4	+63.7
≤94	73.3	0.0	26.7	0.0	73.3	+63.5
≤100	73.3	0.0	26.7	0.0	73.3	+63.5

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (200% of the government-definition national line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.1	Only poor targeted
≤9	0.7	100.0	0.9	Only poor targeted
≤14	1.4	100.0	1.9	Only poor targeted
≤19	4.4	100.0	6.0	Only poor targeted
≤24	8.6	97.3	11.4	35.7:1
≤29	16.5	96.1	21.7	24.4:1
≤34	25.8	95.6	33.6	22.0:1
≤39	37.5	94.6	48.4	17.5:1
≤44	50.0	91.3	62.4	10.5:1
≤49	61.0	88.0	73.3	7.4:1
≤54	71.0	85.3	82.7	5.8:1
≤59	80.2	82.0	89.8	4.6:1
≤64	87.8	79.1	94.8	3.8:1
≤69	94.2	76.2	98.0	3.2:1
≤74	97.5	74.7	99.4	3.0:1
≤79	99.0	73.9	99.8	2.8:1
≤84	99.7	73.5	100.0	2.8:1
≤89	99.9	73.3	100.0	2.8:1
≤94	100.0	73.3	100.0	2.7:1
≤100	100.0	73.3	100.0	2.7:1

Tables for
the Government-Definition
Median Poverty Line

Figure 3 (the government-definition median line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	55.8
5–9	55.8
10–14	55.8
15–19	31.7
20–24	25.8
25–29	23.1
30–34	15.1
35–39	8.0
40–44	3.2
45–49	2.3
50–54	2.0
55–59	0.5
60–64	0.5
65–69	0.4
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (the government-definition median line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

		Difference between estimate and true value		
		Confidence interval (±percentage points)		
Score	Diff.	90-percent	95-percent	99-percent
0–4	+55.8	0.0	0.0	0.0
5–9	−15.1	11.3	11.7	13.1
10–14	+5.9	7.8	9.2	11.7
15–19	−25.4	14.4	14.8	15.5
20–24	−3.9	3.5	3.8	4.6
25–29	+4.6	1.8	2.1	2.7
30–34	+7.3	1.1	1.3	1.7
35–39	−0.3	1.1	1.3	1.8
40–44	+1.6	0.4	0.5	0.6
45–49	−0.0	0.6	0.7	0.8
50–54	+0.9	0.3	0.4	0.5
55–59	+0.5	0.0	0.0	0.0
60–64	+0.5	0.0	0.0	0.0
65–69	+0.4	0.0	0.0	0.0
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (the government-definition median line): Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Difference between estimate and true value			
	Diff.	Confidence interval (±percentage points)		
		90-percent	95-percent	99-percent
1	+0.1	48.6	53.4	76.7
4	+0.8	19.7	24.8	35.3
8	+0.9	14.2	16.6	24.7
16	+0.6	10.5	12.4	16.7
32	+0.4	7.8	8.9	11.5
64	+0.5	5.4	6.4	8.4
128	+0.4	4.0	4.9	6.2
256	+0.5	2.7	3.3	4.4
512	+0.5	2.0	2.4	2.9
1,024	+0.5	1.3	1.7	2.1
2,048	+0.5	0.9	1.1	1.4
4,096	+0.5	0.7	0.8	1.0
8,192	+0.4	0.5	0.6	0.8
16,384	+0.4	0.4	0.4	0.6

Figure 11 (the government-definition median line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.0	7.7	0.1	92.2	92.2	−98.8
≤9	0.4	7.3	0.3	92.0	92.3	−86.6
≤14	0.7	6.9	0.7	91.6	92.3	−72.1
≤19	2.4	5.3	2.0	90.3	92.7	−11.5
≤24	3.6	4.1	5.0	87.3	90.9	+35.1
≤29	5.1	2.5	11.4	80.9	86.0	−48.3
≤34	6.0	1.7	19.8	72.4	78.4	−158.1
≤39	6.9	0.7	30.6	61.7	68.7	−298.0
≤44	7.2	0.5	42.8	49.4	56.6	−458.0
≤49	7.5	0.1	53.5	38.8	46.3	−596.7
≤54	7.7	0.0	63.3	29.0	36.6	−724.5
≤59	7.7	0.0	72.5	19.8	27.4	−844.3
≤64	7.7	0.0	80.1	12.2	19.8	−943.4
≤69	7.7	0.0	86.4	5.8	13.5	−1,025.9
≤74	7.7	0.0	89.8	2.5	10.2	−1,069.3
≤79	7.7	0.0	91.2	1.0	8.7	−1,088.5
≤84	7.7	0.0	91.9	0.3	8.0	−1,097.7
≤89	7.7	0.0	92.2	0.1	7.8	−1,100.5
≤94	7.7	0.0	92.3	0.0	7.7	−1,101.8
≤100	7.7	0.0	92.3	0.0	7.7	−1,101.8

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (the government-definition median line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	0.0	0.0	0.0:1
≤9	0.7	55.4	4.8	1.2:1
≤14	1.4	52.1	9.6	1.1:1
≤19	4.4	55.3	31.5	1.2:1
≤24	8.6	42.1	47.1	0.7:1
≤29	16.5	31.1	67.1	0.5:1
≤34	25.8	23.1	77.7	0.3:1
≤39	37.5	18.5	90.5	0.2:1
≤44	50.0	14.4	94.0	0.2:1
≤49	61.0	12.4	98.2	0.1:1
≤54	71.0	10.8	100.0	0.1:1
≤59	80.2	9.6	100.0	0.1:1
≤64	87.8	8.7	100.0	0.1:1
≤69	94.2	8.2	100.0	0.1:1
≤74	97.5	7.9	100.0	0.1:1
≤79	99.0	7.8	100.0	0.1:1
≤84	99.7	7.7	100.0	0.1:1
≤89	99.9	7.7	100.0	0.1:1
≤94	100.0	7.7	100.0	0.1:1
≤100	100.0	7.7	100.0	0.1:1

Tables for
the Government-Definition
$1.25/day 2005 PPP Line

Figure 3 (the government-definition $1.25/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	41.4
5–9	41.4
10–14	26.4
15–19	11.8
20–24	10.0
25–29	9.6
30–34	6.3
35–39	1.0
40–44	0.7
45–49	0.3
50–54	0.1
55–59	0.1
60–64	0.0
65–69	0.0
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (the government-definition \$1.25/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

| Score | Diff. | Difference between estimate and true value | | |
| | | Confidence interval (±percentage points) | | |
		90-percent	95-percent	99-percent
0–4	+41.4	0.0	0.0	0.0
5–9	−2.3	9.3	10.8	13.3
10–14	+2.0	6.3	7.6	10.7
15–19	−11.5	7.3	7.6	8.3
20–24	−3.0	2.5	2.7	3.3
25–29	+2.9	1.2	1.4	1.8
30–34	+2.3	0.8	0.9	1.3
35–39	+0.6	0.2	0.2	0.2
40–44	+0.6	0.1	0.1	0.1
45–49	−0.5	0.4	0.4	0.5
50–54	+0.1	0.0	0.0	0.0
55–59	+0.1	0.0	0.0	0.0
60–64	+0.0	0.0	0.0	0.0
65–69	+0.0	0.0	0.0	0.0
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (the government-definition $1.25/day line):
Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

| Sample Size n | Difference between estimate and true value | | | |
| | Diff. | Confidence interval (±percentage points) | | |
		90-percent	95-percent	99-percent
1	−0.1	5.0	50.0	63.8
4	+0.1	15.1	18.4	27.1
8	+0.2	9.2	10.7	17.0
16	+0.0	7.1	8.6	12.0
32	+0.1	4.8	6.1	8.2
64	+0.1	3.5	4.2	5.6
128	+0.1	2.7	3.3	4.2
256	+0.1	1.8	2.2	2.9
512	+0.1	1.3	1.5	2.1
1,024	+0.1	0.9	1.1	1.4
2,048	+0.1	0.6	0.7	1.0
4,096	+0.1	0.4	0.5	0.7
8,192	+0.1	0.3	0.4	0.5
16,384	+0.1	0.2	0.3	0.4

Figure 11 (the government-definition $1.25/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.0	2.8	0.1	97.1	97.1	−96.9
≤9	0.2	2.6	0.5	96.7	96.9	−69.6
≤14	0.4	2.4	1.0	96.1	96.5	−36.4
≤19	1.1	1.7	3.2	93.9	95.1	−13.8
≤24	1.7	1.2	6.9	90.2	91.9	−143.3
≤29	2.2	0.6	14.3	82.8	85.1	−402.6
≤34	2.6	0.2	23.2	74.0	76.6	−713.8
≤39	2.7	0.2	34.8	62.4	65.0	−1,122.9
≤44	2.7	0.1	47.3	49.8	52.6	−1,562.9
≤49	2.8	0.0	58.2	39.0	41.8	−1,944.1
≤54	2.8	0.0	68.2	29.0	31.8	−2,295.8
≤59	2.8	0.0	77.4	19.8	22.6	−2,619.1
≤64	2.8	0.0	85.0	12.2	15.0	−2,886.2
≤69	2.8	0.0	91.3	5.8	8.7	−3,109.0
≤74	2.8	0.0	94.7	2.5	5.3	−3,225.9
≤79	2.8	0.0	96.1	1.0	3.9	−3,277.7
≤84	2.8	0.0	96.8	0.3	3.2	−3,302.5
≤89	2.8	0.0	97.1	0.1	2.9	−3,310.1
≤94	2.8	0.0	97.2	0.0	2.8	−3,313.7
≤100	2.8	0.0	97.2	0.0	2.8	−3,313.7

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (the government-definition $1.25/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	0.0	0.0	0.0:1
≤9	0.7	31.0	7.2	0.4:1
≤14	1.4	28.3	14.0	0.4:1
≤19	4.4	26.0	39.9	0.4:1
≤24	8.6	19.5	58.8	0.2:1
≤29	16.5	13.5	78.4	0.2:1
≤34	25.8	10.2	92.0	0.1:1
≤39	37.5	7.2	94.6	0.1:1
≤44	50.0	5.4	95.6	0.1:1
≤49	61.0	4.7	100.0	0.0:1
≤54	71.0	4.0	100.0	0.0:1
≤59	80.2	3.5	100.0	0.0:1
≤64	87.8	3.2	100.0	0.0:1
≤69	94.2	3.0	100.0	0.0:1
≤74	97.5	2.9	100.0	0.0:1
≤79	99.0	2.9	100.0	0.0:1
≤84	99.7	2.9	100.0	0.0:1
≤89	99.9	2.8	100.0	0.0:1
≤94	100.0	2.8	100.0	0.0:1
≤100	100.0	2.8	100.0	0.0:1

Tables for
the Government-Definition
$2.00/day 2005 PPP Line

Figure 3 (the government-definition $2.00/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	91.9
10–14	80.8
15–19	64.3
20–24	59.7
25–29	54.9
30–34	38.4
35–39	27.3
40–44	16.1
45–49	10.9
50–54	8.1
55–59	5.1
60–64	1.9
65–69	1.6
70–74	0.0
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (the government-definition $2.00/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2011 validation sample

| | Difference between estimate and true value | | | |
| | | Confidence interval (±percentage points) | | |
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.4	4.3	5.2	6.3
10–14	+5.3	6.6	7.9	10.9
15–19	−26.0	14.1	14.3	14.6
20–24	+0.6	3.1	3.9	5.0
25–29	+11.7	2.3	2.7	3.4
30–34	+6.8	1.9	2.3	3.1
35–39	+3.1	1.6	1.9	2.6
40–44	+1.5	1.2	1.5	1.9
45–49	−1.4	1.3	1.5	1.9
50–54	+1.9	0.9	1.1	1.4
55–59	+2.0	0.7	0.9	1.2
60–64	−0.2	0.7	0.8	1.1
65–69	−2.6	1.8	2.0	2.2
70–74	+0.0	0.0	0.0	0.0
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (the government-definition $2.00/day line):
   Average differences between estimated poverty rates
   and true values for a group at a point in time, with
   confidence intervals, for 1,000 bootstraps of various
   sample sizes, 2011 scorecard applied to the 2011
   validation sample

Sample Size n	Difference between estimate and true value			
	Diff.	Confidence interval ($\pm$percentage points)		
		90-percent	95-percent	99-percent
1	−0.8	69.4	72.0	78.9
4	+1.1	31.9	36.5	50.1
8	+1.4	22.1	26.5	34.2
16	+1.3	15.3	18.0	23.4
32	+1.2	11.2	13.2	17.8
64	+1.3	8.0	9.7	12.5
128	+1.4	5.8	7.0	8.8
256	+1.5	4.0	4.9	6.6
512	+1.5	2.8	3.4	4.2
1,024	+1.5	2.0	2.3	2.9
2,048	+1.6	1.4	1.7	2.1
4,096	+1.5	0.9	1.1	1.5
8,192	+1.5	0.7	0.8	1.0
16,384	+1.6	0.5	0.6	0.8

Figure 11 (the government-definition $2.00/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.4	Only poor targeted
≤9	0.7	90.2	2.8	9.2:1
≤14	1.4	83.5	5.5	5.1:1
≤19	4.4	87.8	18.0	7.2:1
≤24	8.6	73.9	29.7	2.8:1
≤29	16.5	59.1	45.7	1.4:1
≤34	25.8	50.6	60.9	1.0:1
≤39	37.5	42.4	74.4	0.7:1
≤44	50.0	36.2	84.6	0.6:1
≤49	61.0	32.3	92.1	0.5:1
≤54	71.0	28.9	96.0	0.4:1
≤59	80.2	26.0	97.7	0.4:1
≤64	87.8	24.0	98.6	0.3:1
≤69	94.2	22.7	100.0	0.3:1
≤74	97.5	21.9	100.0	0.3:1
≤79	99.0	21.6	100.0	0.3:1
≤84	99.7	21.5	100.0	0.3:1
≤89	99.9	21.4	100.0	0.3:1
≤94	100.0	21.4	100.0	0.3:1
≤100	100.0	21.4	100.0	0.3:1

Figure 12 (the government-definition $2.00/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.4	Only poor targeted
≤9	0.7	90.2	2.8	9.2:1
≤14	1.4	83.5	5.5	5.1:1
≤19	4.4	87.8	18.0	7.2:1
≤24	8.6	73.9	29.7	2.8:1
≤29	16.5	59.1	45.7	1.4:1
≤34	25.8	50.6	60.9	1.0:1
≤39	37.5	42.4	74.4	0.7:1
≤44	50.0	36.2	84.6	0.6:1
≤49	61.0	32.3	92.1	0.5:1
≤54	71.0	28.9	96.0	0.4:1
≤59	80.2	26.0	97.7	0.4:1
≤64	87.8	24.0	98.6	0.3:1
≤69	94.2	22.7	100.0	0.3:1
≤74	97.5	21.9	100.0	0.3:1
≤79	99.0	21.6	100.0	0.3:1
≤84	99.7	21.5	100.0	0.3:1
≤89	99.9	21.4	100.0	0.3:1
≤94	100.0	21.4	100.0	0.3:1
≤100	100.0	21.4	100.0	0.3:1

Tables for
the Government-Definition
$2.50/day 2005 PPP Line

Figure 3 (the government-definition $2.50/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	95.4
10–14	91.3
15–19	88.0
20–24	87.3
25–29	80.3
30–34	75.1
35–39	58.3
40–44	44.8
45–49	31.1
50–54	25.2
55–59	16.5
60–64	7.9
65–69	6.3
70–74	0.6
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

Figure 6 (the government-definition \$2.50/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16{,}384$, 2011 scorecard applied to the 2011 validation sample

| | | Difference between estimate and true value | | |
| | | Confidence interval (±percentage points) | | |
Score	Diff.	90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	−4.6	2.3	2.3	2.3
10–14	+7.8	6.2	7.3	9.5
15–19	−7.8	4.6	4.7	4.8
20–24	+7.2	2.5	3.0	4.1
25–29	+2.7	2.0	2.4	3.0
30–34	+15.7	2.1	2.5	3.6
35–39	+2.2	1.9	2.3	3.0
40–44	+7.2	1.8	2.1	2.7
45–49	−9.3	5.6	5.8	6.2
50–54	+8.9	1.4	1.7	2.3
55–59	+3.3	1.5	1.7	2.4
60–64	−5.0	3.4	3.5	3.9
65–69	−3.0	2.3	2.4	2.7
70–74	−1.1	1.1	1.3	1.6
75–79	+0.0	0.0	0.0	0.0
80–84	+0.0	0.0	0.0	0.0
85–89	+0.0	0.0	0.0	0.0
90–94	+0.0	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (the government-definition $2.50/day line):
Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size	Difference between estimate and true value			
		Confidence interval (±percentage points)		
n	Diff.	90-percent	95-percent	99-percent
1	+0.0	72.0	81.9	90.5
4	+2.5	36.3	42.8	52.5
8	+2.8	26.4	31.8	40.7
16	+2.8	19.4	23.3	28.9
32	+2.9	13.7	15.7	20.1
64	+2.8	9.7	11.2	13.7
128	+2.7	6.6	7.7	9.9
256	+2.8	4.6	5.5	6.8
512	+2.8	3.2	3.7	4.8
1,024	+2.8	2.3	2.8	3.4
2,048	+2.8	1.7	2.0	2.6
4,096	+2.8	1.1	1.3	1.7
8,192	+2.8	0.8	0.9	1.2
16,384	+2.9	0.6	0.6	0.9

Figure 11 (the government-definition $2.50/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.2	Only poor targeted
≤9	0.7	100.0	1.6	Only poor targeted
≤14	1.4	93.0	3.2	13.3:1
≤19	4.4	94.5	10.1	17.3:1
≤24	8.6	87.5	18.3	7.0:1
≤29	16.5	82.8	33.4	4.8:1
≤34	25.8	75.5	47.4	3.1:1
≤39	37.5	69.7	63.7	2.3:1
≤44	50.0	62.2	75.9	1.6:1
≤49	61.0	58.6	87.1	1.4:1
≤54	71.0	53.1	92.0	1.1:1
≤59	80.2	48.8	95.5	1.0:1
≤64	87.8	45.8	98.0	0.8:1
≤69	94.2	43.5	99.9	0.8:1
≤74	97.5	42.1	100.0	0.7:1
≤79	99.0	41.5	100.0	0.7:1
≤84	99.7	41.2	100.0	0.7:1
≤89	99.9	41.1	100.0	0.7:1
≤94	100.0	41.0	100.0	0.7:1
≤100	100.0	41.0	100.0	0.7:1

Figure 12 (the government-definition \$2.50/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.2	Only poor targeted
≤9	0.7	100.0	1.6	Only poor targeted
≤14	1.4	93.0	3.2	13.3:1
≤19	4.4	94.5	10.1	17.3:1
≤24	8.6	87.5	18.3	7.0:1
≤29	16.5	82.8	33.4	4.8:1
≤34	25.8	75.5	47.4	3.1:1
≤39	37.5	69.7	63.7	2.3:1
≤44	50.0	62.2	75.9	1.6:1
≤49	61.0	58.6	87.1	1.4:1
≤54	71.0	53.1	92.0	1.1:1
≤59	80.2	48.8	95.5	1.0:1
≤64	87.8	45.8	98.0	0.8:1
≤69	94.2	43.5	99.9	0.8:1
≤74	97.5	42.1	100.0	0.7:1
≤79	99.0	41.5	100.0	0.7:1
≤84	99.7	41.2	100.0	0.7:1
≤89	99.9	41.1	100.0	0.7:1
≤94	100.0	41.0	100.0	0.7:1
≤100	100.0	41.0	100.0	0.7:1

Tables for
the Government-Definition
$5.00/day 2005 PPP Line

Figure 3 (the government-definition $5.00/day line): Estimated poverty likelihoods associated with scores

If a household's score is . . .	. . . then the likelihood (%) of being below the poverty line is:
0–4	100.0
5–9	100.0
10–14	100.0
15–19	100.0
20–24	100.0
25–29	99.7
30–34	98.5
35–39	97.6
40–44	96.7
45–49	93.5
50–54	90.6
55–59	82.8
60–64	78.9
65–69	68.8
70–74	51.7
75–79	50.8
80–84	45.4
85–89	33.8
90–94	29.1
95–100	29.1

Figure 6 (the government-definition $5.00/day line): For each score range, average differences between estimated and true poverty likelihoods for households, with confidence intervals, from 1,000 bootstraps of $n = 16,384$, 2011 scorecard applied to the 2011 validation sample

Score	Diff.	Difference between estimate and true value Confidence interval ($\pm$percentage points)		
		90-percent	95-percent	99-percent
0–4	+0.0	0.0	0.0	0.0
5–9	+0.0	0.0	0.0	0.0
10–14	+0.0	0.0	0.0	0.0
15–19	+0.0	0.0	0.0	0.0
20–24	+0.0	0.0	0.0	0.0
25–29	+1.1	0.5	0.6	0.8
30–34	+0.1	0.5	0.6	0.8
35–39	−0.4	0.6	0.7	0.9
40–44	+5.0	1.2	1.3	1.8
45–49	−0.4	1.0	1.2	1.6
50–54	+0.8	1.3	1.5	2.0
55–59	+1.7	1.8	2.1	2.6
60–64	−3.8	2.8	3.0	3.4
65–69	+2.8	2.7	3.1	4.2
70–74	−10.7	7.2	7.5	8.4
75–79	+16.1	5.0	5.8	7.8
80–84	−23.7	15.7	16.3	18.1
85–89	−16.0	15.7	17.5	22.6
90–94	+29.1	0.0	0.0	0.0
95–100	+0.0	0.0	0.0	0.0

Figure 7 (the government-definition $5.00/day line):
Average differences between estimated poverty rates and true values for a group at a point in time, with confidence intervals, for 1,000 bootstraps of various sample sizes, 2011 scorecard applied to the 2011 validation sample

Sample Size n	Diff.	Confidence interval (±percentage points) 90-percent	95-percent	99-percent
1	+0.0	55.0	69.5	73.2
4	+0.9	23.2	27.8	36.8
8	+0.7	15.3	19.1	25.6
16	+0.9	11.8	13.8	19.0
32	+0.8	8.7	10.4	13.3
64	+0.8	6.1	7.1	9.4
128	+0.7	4.4	5.1	6.5
256	+0.7	2.9	3.6	5.0
512	+0.7	2.1	2.5	3.3
1,024	+0.6	1.5	1.8	2.3
2,048	+0.6	1.1	1.2	1.6
4,096	+0.6	0.8	0.9	1.2
8,192	+0.6	0.5	0.6	0.8
16,384	+0.6	0.4	0.4	0.6

Figure 11 (the government-definition $5.00/day line): Percentages of households by cut-off score and targeting classification, along with the hit rate and BPAC, 2011 scorecard applied to the 2011 validation sample

Score	Inclusion: < poverty line correctly targeted	Undercoverage: < poverty line mistakenly non-targeted	Leakage: ≥ poverty line mistakenly targeted	Exclusion: ≥ poverty line correctly non-targeted	Hit rate Inclusion + Exclusion	BPAC See text
≤4	0.1	89.3	0.0	10.6	10.7	−99.8
≤9	0.7	88.8	0.0	10.6	11.2	−98.5
≤14	1.4	88.0	0.0	10.6	12.0	−96.8
≤19	4.4	85.1	0.0	10.6	14.9	−90.2
≤24	8.6	80.8	0.0	10.6	19.2	−80.8
≤29	16.4	73.0	0.1	10.4	26.8	−63.2
≤34	25.5	64.0	0.3	10.3	35.7	−42.7
≤39	37.0	52.5	0.5	10.0	47.0	−16.7
≤44	48.7	40.7	1.3	9.3	58.0	+10.5
≤49	59.1	30.3	1.9	8.7	67.8	+34.4
≤54	68.1	21.4	3.0	7.6	75.7	+55.5
≤59	75.6	13.8	4.6	6.0	81.6	+74.3
≤64	81.9	7.6	6.0	4.6	86.5	+89.8
≤69	86.3	3.2	7.9	2.7	88.9	+91.2
≤74	88.2	1.2	9.3	1.3	89.6	+89.6
≤79	88.9	0.6	10.1	0.5	89.3	+88.7
≤84	89.3	0.1	10.4	0.2	89.5	+88.4
≤89	89.4	0.0	10.5	0.1	89.5	+88.3
≤94	89.4	0.0	10.6	0.0	89.4	+88.2
≤100	89.4	0.0	10.6	0.0	89.4	+88.2

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100.

Figure 12 (the government-definition \$5.00/day line): Share of all households who are targeted (that is, score at or below a cut-off), the share of targeted households who are poor (that is, have consumption below the poverty line), the share of poor households who are targeted, and the number of poor households who are successfully targeted (inclusion) per non-poor household mistakenly targeted (leakage), 2011 scorecard applied to the 2011 validation sample

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
≤4	0.1	100.0	0.1	Only poor targeted
≤9	0.7	100.0	0.7	Only poor targeted
≤14	1.4	100.0	1.6	Only poor targeted
≤19	4.4	100.0	4.9	Only poor targeted
≤24	8.6	100.0	9.6	Only poor targeted
≤29	16.5	99.2	18.3	125.9:1
≤34	25.8	98.8	28.5	83.6:1
≤39	37.5	98.6	41.3	70.2:1
≤44	50.0	97.4	54.5	37.0:1
≤49	61.0	96.9	66.1	31.3:1
≤54	71.0	95.8	76.1	22.9:1
≤59	80.2	94.2	84.6	16.4:1
≤64	87.8	93.2	91.5	13.7:1
≤69	94.2	91.6	96.5	10.9:1
≤74	97.5	90.5	98.7	9.5:1
≤79	99.0	89.8	99.4	8.8:1
≤84	99.7	89.6	99.9	8.6:1
≤89	99.9	89.5	100.0	8.5:1
≤94	100.0	89.4	100.0	8.5:1
≤100	100.0	89.4	100.0	8.5:1

Figure 13 (all Cambodia): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	n	Old Natl. 100%	Old Natl. 150%	Old Natl. 200%	Old $1.25	Old $2.50	n	Gov Natl. 100%	Gov Natl. 150%	Gov Natl. 200%	Gov Median	Gov $1.25	Gov $2.00	Gov $2.50	Gov $5.00	n	WB Natl. 100%	WB Natl. 150%	WB Natl. 200%	WB Median	WB $1.25	WB $2.00	WB $2.50	WB $5.00
2004	Urban	Line		2,072	3,108	4,144	2,168	4,335		—	—	—	—	—	—	—	—		2,845	4,268	5,690	2,125	2,162	3,460	4,324	8,649
2004	Urban	Rate (households)	2,399	15.7	33.8	47.8	17.8	49.8	2,399	—	—	—	—	—	—	—	—	2,399	26.8	47.8	63.1	12.3	14.0	36.8	48.7	82.6
2004	Urban	Rate (people)		17.6	36.8	50.5	20.0	52.4		—	—	—	—	—	—	—	—		29.9	50.9	66.1	14.6	16.5	40.1	51.9	85.2
2004	Rural	Line		1,780	2,670	3,560	1,861	3,722		—	—	—	—	—	—	—	—		2,450	3,675	4,900	1,731	1,862	2,979	3,724	7,448
2004	Rural	Rate (households)	9,594	32.8	62.2	78.4	35.9	80.4	9,594	—	—	—	—	—	—	—	—	9,594	51.1	78.5	89.9	23.7	29.2	65.3	79.3	97.3
2004	Rural	Rate (people)		37.8	67.2	82.0	41.1	83.7		—	—	—	—	—	—	—	—		57.5	82.7	92.3	28.8	34.8	70.9	83.3	98.1
2004	Overall	Line		1,825	2,738	3,651	1,909	3,818		—	—	—	—	—	—	—	—		2,512	3,767	5,023	1,792	1,909	3,054	3,817	7,635
2004	Overall	Rate (households)	11,993	30.2	57.9	73.8	33.1	75.8	11,993	—	—	—	—	—	—	—	—	11,993	47.4	73.9	85.9	22.0	26.9	61.0	74.7	95.1
2004	Overall	Rate (people)		34.7	62.5	77.1	37.8	78.8		—	—	—	—	—	—	—	—		53.2	77.7	88.2	26.6	31.9	66.1	78.4	96.1
2009	Urban	Line		3,803	5,704	7,605	3,125	6,250		5,301	7,952	10,603	4,317	3,752	6,004	7,504	15,009		4,772	7,158	9,545	3,926	3,198	5,117	6,396	12,792
2009	Urban	Rate (households)	2,384	3.3	13.5	27.0	1.2	17.6	2,384	12.5	34.3	56.6	5.9	3.5	17.8	30.7	78.3	2,384	6.6	20.9	37.3	3.1	0.9	8.4	16.2	58.0
2009	Urban	Rate (people)		4.1	15.9	30.9	1.6	20.6		15.4	39.7	61.8	7.4	4.6	21.3	35.8	82.1		8.0	24.2	41.7	3.9	1.3	10.3	19.0	62.6
2009	Rural	Line		3,220	4,831	6,441	2,646	5,293		3,515	5,273	7,031	2,846	2,488	3,981	4,976	9,953		3,925	5,887	7,849	3,126	2,630	4,208	5,260	10,520
2009	Rural	Rate (households)	9,586	13.6	41.4	64.6	5.9	49.3	9,586	20.7	51.8	71.8	9.9	5.8	29.2	46.9	87.9	9,586	23.1	54.8	75.3	11.0	5.2	28.3	45.5	88.7
2009	Rural	Rate (people)		16.9	47.4	70.4	7.6	55.3		24.5	57.3	76.6	12.3	7.4	34.0	52.4	90.7		27.5	60.7	80.0	13.8	6.7	33.2	51.3	91.5
2009	Overall	Line		3,328	4,992	6,655	2,735	5,469		3,863	5,795	7,727	3,133	2,735	4,375	5,469	10,938		4,081	6,121	8,162	3,274	2,735	4,375	5,469	10,938
2009	Overall	Rate (households)	11,970	11.7	36.4	57.8	5.0	43.6	11,970	19.2	48.4	68.9	9.2	5.4	27.0	43.8	86.0	11,970	20.1	48.8	68.5	9.5	4.4	24.7	40.2	83.2
2009	Overall	Rate (people)		14.6	41.6	63.1	6.5	48.9		22.7	53.9	73.7	11.4	6.8	31.5	49.2	89.1		23.9	54.0	73.0	12.0	5.7	29.0	45.3	86.2
2011	Urban	Line		—	—	—	—	—		6,008	9,011	12,015	5,025	4,097	6,555	8,193	16,386		5,409	8,114	10,818	4,507	3,500	5,599	6,999	13,999
2011	Urban	Rate (households)	1,351	—	—	—	—	—	1,351	12.4	36.5	57.8	5.7	2.5	15.8	29.6	80.9	1,351	6.2	23.2	40.6	2.9	1.1	7.4	15.7	57.8
2011	Urban	Rate (people)		—	—	—	—	—		16.4	43.3	64.6	8.2	3.7	20.3	35.7	84.8		8.7	28.4	46.3	4.3	1.9	10.2	20.0	62.9
2011	Rural	Line		—	—	—	—	—		3,987	5,981	7,975	3,356	2,719	4,350	5,438	10,876		4,439	6,659	8,878	3,650	2,872	4,595	5,744	11,488
2011	Rural	Rate (households)	2,235	—	—	—	—	—	2,235	16.7	52.3	77.2	8.2	2.9	22.4	43.9	91.5	2,235	18.9	56.0	78.9	9.0	2.6	21.7	41.9	91.4
2011	Rural	Rate (people)		—	—	—	—	—		20.7	58.9	81.5	10.4	3.8	27.2	50.5	93.7		23.6	63.6	84.1	11.8	3.5	27.1	49.3	93.9
2011	Overall	Line		—	—	—	—	—		4,399	6,598	8,797	3,696	2,999	4,799	5,999	11,998		4,637	6,955	9,273	3,825	3,000	4,800	6,000	12,000
2011	Overall	Rate (households)	3,586	—	—	—	—	—	3,586	15.9	49.2	73.3	7.7	2.8	21.1	41.1	89.4	3,586	16.4	49.5	71.3	7.8	2.3	18.9	36.8	84.7
2011	Overall	Rate (people)		—	—	—	—	—		19.8	55.8	78.1	9.9	3.8	25.8	47.5	91.9		20.5	56.5	76.4	10.3	3.2	23.7	43.3	87.6
2012	Urban	Line		—	—	—	—	—		6,115	9,173	12,231	5,229	4,157	6,651	8,313	16,626		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	1,485	—	—	—	—	—	1,485	11.4	38.7	64.9	5.4	1.3	15.3	29.5	82.3	1,485	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		15.3	44.6	70.1	7.6	2.1	19.9	35.0	85.7		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	2,362	—	—	—	—	—	2,362	16.4	52.5	76.0	7.9	2.4	22.5	42.6	90.5	2,362	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		20.0	58.0	80.2	10.0	3.3	27.0	48.0	92.6		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,540	6,810	9,080	3,855	3,086	4,938	6,172	12,344		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	3,847	—	—	—	—	—	3,847	15.2	49.2	73.4	7.3	2.1	20.8	39.5	88.6	3,847	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		18.9	54.9	77.9	9.4	3.0	25.3	45.0	91.0		—	—	—	—	—	—	—	—

Figure 13 (Banteay Mean Chey): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	Gov n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00	WB n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00
2004	Urban	Line	150	1,952	2,928	3,904	2,042	4,084	150	—	—	—	—	—	—	—	—	150	2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)		32.7	57.1	71.2	37.1	73.2		—	—	—	—	—	—	—	—		49.8	71.6	84.4	27.1	29.0	61.9	71.6	93.4
2004	Urban	Rate (people)		38.4	60.0	73.7	42.9	75.8		—	—	—	—	—	—	—	—		54.5	74.9	86.1	33.3	35.0	65.3	74.9	94.1
2004	Rural	Line	500	1,753	2,630	3,506	1,833	3,666	500	—	—	—	—	—	—	—	—	500	2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)		32.2	60.4	76.1	36.4	77.8		—	—	—	—	—	—	—	—		48.7	74.7	83.3	23.8	29.3	62.4	75.1	94.3
2004	Rural	Rate (people)		36.9	66.5	80.7	41.8	82.2		—	—	—	—	—	—	—	—		55.7	80.2	87.6	28.8	34.4	68.9	80.7	95.4
2004	Overall	Line	650	1,787	2,680	3,574	1,869	3,737	650	—	—	—	—	—	—	—	—	650	2,444	3,666	4,888	1,720	1,857	2,972	3,715	7,430
2004	Overall	Rate (households)		32.3	59.9	75.3	36.5	77.1		—	—	—	—	—	—	—	—		48.9	74.2	83.5	24.3	29.3	62.4	74.6	94.2
2004	Overall	Rate (people)		37.2	65.4	79.5	42.0	81.1		—	—	—	—	—	—	—	—		55.5	79.3	87.4	29.5	34.5	68.3	79.7	95.2
2009	Urban	Line	177	3,458	5,187	6,916	2,842	5,683	177	4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321	177	4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)		9.1	32.4	55.5	1.9	39.0		23.4	52.1	71.7	14.6	6.1	31.0	49.7	87.1		15.2	45.2	65.1	7.3	1.9	17.1	35.4	84.3
2009	Urban	Rate (people)		10.6	34.0	56.9	2.2	40.6		25.3	53.4	74.7	16.5	6.5	32.0	50.3	88.2		18.4	47.1	67.3	8.7	2.2	20.1	36.8	85.2
2009	Rural	Line	459	3,213	4,820	6,426	2,640	5,281	459	3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889	459	3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)		15.9	46.3	71.4	7.2	55.6		24.3	59.3	76.9	12.2	6.3	33.0	53.3	92.2		28.6	64.4	82.5	11.7	5.7	33.9	52.8	93.2
2009	Rural	Rate (people)		19.7	50.7	75.7	9.7	60.2		28.3	62.8	79.9	14.9	8.2	37.4	57.0	93.9		33.1	68.9	85.5	15.1	8.1	38.1	57.4	94.7
2009	Overall	Line	636	3,274	4,912	6,549	2,691	5,382	636	3,722	5,583	7,445	3,027	2,635	4,215	5,269	10,538	636	4,004	6,006	8,008	3,211	2,683	4,293	5,366	10,732
2009	Overall	Rate (households)		14.1	42.8	67.3	5.9	51.3		24.0	57.4	75.4	12.8	6.3	32.4	52.3	90.8		25.2	59.5	78.1	10.6	4.7	29.6	48.4	90.9
2009	Overall	Rate (people)		17.4	46.5	71.0	7.8	55.2		27.5	60.3	78.5	15.3	7.7	35.9	55.2	92.4		29.4	63.4	81.0	13.5	6.6	33.6	52.2	92.3
2011	Urban	Line	80	—	—	—	—	—	80	4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395	80	4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)		—	—	—	—	—		9.2	26.8	54.2	4.4	2.9	10.5	20.7	78.7		5.5	26.7	50.5	4.3	1.4	7.9	18.2	73.8
2011	Urban	Rate (people)		—	—	—	—	—		13.3	34.2	64.4	8.8	5.5	14.6	27.2	84.1		10.4	35.3	61.1	8.6	2.9	13.5	24.9	79.6
2011	Rural	Line	100	—	—	—	—	—	100	3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782	100	4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)		—	—	—	—	—		21.9	56.0	79.6	11.3	4.6	24.9	46.7	93.8		24.3	57.2	80.5	16.2	4.6	24.3	39.3	93.0
2011	Rural	Rate (people)		—	—	—	—	—		24.2	58.7	84.0	12.4	6.2	28.7	49.7	95.7		28.0	61.6	84.5	19.1	5.8	28.0	43.9	94.5
2011	Overall	Line	180	—	—	—	—	—	180	4,180	6,269	8,359	3,468	2,850	4,560	5,700	11,400	180	4,518	6,776	9,035	3,689	2,923	4,677	5,846	11,691
2011	Overall	Rate (households)		—	—	—	—	—		18.6	48.4	73.0	9.5	4.2	21.2	39.9	89.8		19.4	49.3	72.7	13.1	3.8	20.1	33.8	88.0
2011	Overall	Rate (people)		—	—	—	—	—		21.6	52.9	79.3	11.6	6.0	25.4	44.4	92.9		23.9	55.4	79.0	16.6	5.1	24.6	39.5	91.0
2012	Urban	Line	80	—	—	—	—	—	80	5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742	80	—	—	—	—	—	—	—	—
2012	Urban	Rate (households)		—	—	—	—	—		8.3	32.4	50.8	5.2	1.3	11.5	28.3	68.6		—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		12.2	36.2	56.2	8.6	2.0	15.0	32.3	71.6		—	—	—	—	—	—	—	—
2012	Rural	Line	101	—	—	—	—	—	101	4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064	101	—	—	—	—	—	—	—	—
2012	Rural	Rate (households)		—	—	—	—	—		20.8	51.1	78.4	7.5	0.0	26.2	44.2	91.5		—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		22.7	52.2	80.8	6.8	0.0	29.5	46.9	94.7		—	—	—	—	—	—	—	—
2012	Overall	Line	181	—	—	—	—	—	181	4,364	6,546	8,728	3,695	2,966	4,746	5,932	11,865	181	—	—	—	—	—	—	—	—
2012	Overall	Rate (households)		—	—	—	—	—		17.1	45.5	70.1	6.8	0.4	21.8	39.4	84.7		—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		19.5	47.4	73.4	7.4	0.6	25.2	42.5	87.8		—	—	—	—	—	—	—	—

Figure 13 (Baat Dambang): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	Gov't n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00	WB n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	200	18.3	41.2	55.8	20.3	56.8	200	—	—	—	—	—	—	—	—	200	27.7	53.6	68.6	13.9	16.7	43.1	54.1	85.1
2004	Urban	Rate (people)		22.1	48.5	62.7	24.5	63.6		—	—	—	—	—	—	—	—		32.5	61.7	75.3	17.7	21.0	50.3	62.1	88.2
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	577	28.8	59.4	76.5	32.2	78.4	577	—	—	—	—	—	—	—	—	577	50.7	77.6	89.2	22.6	28.2	64.5	79.0	96.1
2004	Rural	Rate (people)		36.0	66.3	80.7	39.1	82.2		—	—	—	—	—	—	—	—		57.8	82.2	91.3	28.9	35.3	71.5	83.2	97.1
2004	Overall	Line		1,786	2,679	3,571	1,867	3,735		—	—	—	—	—	—	—	—		2,443	3,664	4,886	1,719	1,856	2,970	3,713	7,426
2004	Overall	Rate (households)	777	26.9	56.2	72.8	30.1	74.6	777	—	—	—	—	—	—	—	—	777	46.6	73.3	85.5	21.0	26.2	60.7	74.6	94.1
2004	Overall	Rate (people)		33.7	63.4	77.8	36.7	79.2		—	—	—	—	—	—	—	—		53.7	78.8	88.7	27.0	33.0	68.0	79.8	95.7
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	197	7.7	26.9	43.8	2.5	33.5	197	23.0	45.8	67.2	11.8	6.6	32.4	41.0	81.8	197	15.1	38.1	56.5	6.4	2.5	20.6	32.9	74.5
2009	Urban	Rate (people)		9.1	31.4	51.6	3.1	38.9		26.2	51.6	73.0	13.9	8.0	37.6	47.6	85.5		17.8	44.7	64.5	8.0	3.1	23.8	38.7	80.2
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	676	11.8	41.2	63.3	3.8	48.3	676	17.9	52.9	72.2	7.7	4.1	29.5	47.8	88.0	676	22.5	54.9	74.3	9.5	3.9	28.9	44.7	89.0
2009	Rural	Rate (people)		15.3	48.5	70.7	5.5	55.3		21.6	60.1	78.2	10.0	5.7	34.6	54.7	91.4		27.7	62.3	79.9	12.6	5.5	34.9	51.8	92.4
2009	Overall	Line		3,257	4,885	6,514	2,676	5,353		3,645	5,467	7,289	2,960	2,580	4,127	5,159	10,318		3,978	5,967	7,956	3,184	2,666	4,265	5,331	10,663
2009	Overall	Rate (households)	873	11.1	38.7	59.9	3.6	45.8	873	18.8	51.7	71.4	8.4	4.6	30.0	46.7	87.0	873	21.3	52.1	71.2	9.0	3.6	27.5	42.7	86.5
2009	Overall	Rate (people)		14.2	45.4	67.3	5.0	52.4		22.4	58.6	77.3	10.7	6.1	35.1	53.4	90.4		25.9	59.1	77.2	11.8	5.1	33.0	49.5	90.2
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	80	—	—	—	—	—	80	18.0	48.1	74.6	6.3	1.3	26.9	44.6	92.8	80	15.1	47.8	69.5	3.7	0.0	16.3	31.6	83.3
2011	Urban	Rate (people)		—	—	—	—	—		25.8	61.3	82.3	11.1	2.0	37.5	55.7	94.6		22.5	60.3	79.8	5.0	0.0	24.0	40.8	89.8
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	160	—	—	—	—	—	160	11.6	47.6	75.4	5.3	0.6	17.0	39.2	89.9	160	16.4	53.3	78.4	6.9	1.2	22.5	41.7	91.7
2011	Rural	Rate (people)		—	—	—	—	—		14.6	56.1	80.4	7.3	0.8	21.4	47.1	92.5		21.8	63.1	85.0	9.2	1.7	29.7	50.8	95.4
2011	Overall	Line		—	—	—	—	—		4,147	6,221	8,294	3,448	2,828	4,525	5,656	11,311		4,504	6,756	9,008	3,681	2,914	4,662	5,828	11,656
2011	Overall	Rate (households)	240	—	—	—	—	—	240	12.7	47.7	75.3	5.5	0.7	18.7	40.1	90.4	240	16.2	52.4	76.8	6.4	1.0	21.5	39.9	90.2
2011	Overall	Rate (people)		—	—	—	—	—		16.9	57.1	80.8	8.1	1.1	24.6	48.8	93.0		21.9	62.5	83.9	8.4	1.3	28.6	48.8	94.3
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	110	—	—	—	—	—	110	13.8	39.9	64.9	2.8	0.0	19.0	30.3	84.2	110	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		16.3	42.1	70.6	4.1	0.0	22.7	32.0	88.1		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	180	—	—	—	—	—	180	14.2	48.1	70.8	8.5	1.8	19.9	38.0	88.6	180	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		17.5	53.0	75.1	11.5	3.6	24.4	42.7	90.1		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,277	6,416	8,554	3,621	2,907	4,651	5,814	11,629		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	290	—	—	—	—	—	290	14.1	46.3	69.5	7.2	1.4	19.7	36.4	87.7	290	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		17.3	50.7	74.1	10.0	2.8	24.1	40.4	89.7		—	—	—	—	—	—	—	—

Figure 13 (Kampong Chaam): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-def n	Natl 100%	Natl 150%	Natl 200%	$1.25	$2.50	Gov n	Natl 100%	Natl 150%	Natl 200%	Median	$1.25	$2.00	$2.50	$5.00	WB n	Natl 100%	Natl 150%	Natl 200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	40	0.0	8.0	10.4	2.8	10.4	40	—	—	—	—	—	—	—	—	40	8.0	8.0	12.8	0.0	0.0	8.0	8.0	42.8
2004	Urban	Rate (people)		0.0	11.0	14.1	4.2	14.1		—	—	—	—	—	—	—	—		11.0	11.0	17.7	0.0	0.0	11.0	11.0	52.3
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	1,599	33.0	62.1	78.2	36.3	80.1	1,599	—	—	—	—	—	—	—	—	1,599	50.5	77.9	90.1	21.8	26.8	64.5	78.7	96.7
2004	Rural	Rate (people)		38.0	67.0	82.2	41.5	83.5		—	—	—	—	—	—	—	—		56.9	82.3	92.8	26.8	32.6	70.3	82.9	97.8
2004	Overall	Line		1,758	2,637	3,515	1,838	3,676		—	—	—	—	—	—	—	—		2,412	3,619	4,825	1,691	1,833	2,933	3,667	7,334
2004	Overall	Rate (households)	1,639	32.2	60.7	76.5	35.5	78.3	1,639	—	—	—	—	—	—	—	—	1,639	49.4	76.1	88.2	21.2	26.2	63.1	76.9	95.4
2004	Overall	Rate (people)		37.1	65.7	80.6	40.6	81.9		—	—	—	—	—	—	—	—		55.8	80.6	91.0	26.2	31.8	68.9	81.2	96.7
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	140	6.2	20.6	34.9	2.7	23.9	140	19.7	38.1	56.8	7.5	6.2	23.5	33.7	75.5	140	11.8	24.6	43.4	7.0	2.7	14.1	20.8	60.8
2009	Urban	Rate (people)		8.4	21.6	41.4	4.0	29.4		23.7	43.2	60.6	10.1	8.9	27.8	38.6	78.1		14.7	31.6	48.1	10.0	4.0	18.7	26.1	64.1
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	1,499	13.1	42.4	66.6	5.4	50.2	1,499	20.7	52.8	73.9	8.9	5.1	30.3	48.0	90.0	1,499	23.3	55.4	77.8	9.7	4.7	28.7	46.2	90.2
2009	Rural	Rate (people)		16.8	49.9	73.9	7.3	58.0		25.3	59.6	80.0	11.5	6.8	36.1	54.9	93.1		28.6	62.8	84.2	12.6	6.4	34.7	53.6	93.6
2009	Overall	Line		3,230	4,844	6,459	2,654	5,308		3,553	5,330	7,106	2,880	2,515	4,024	5,030	10,059		3,938	5,907	7,876	3,142	2,639	4,222	5,278	10,556
2009	Overall	Rate (households)	1,639	12.6	40.9	64.5	5.2	48.4	1,639	20.6	51.8	72.7	8.8	5.2	29.8	47.0	89.0	1,639	22.5	53.3	75.5	9.5	4.6	27.7	44.5	88.2
2009	Overall	Rate (people)		16.2	48.3	71.7	7.1	56.0		25.2	58.4	78.7	11.4	7.0	35.5	53.7	92.1		27.7	60.7	81.8	12.4	6.2	33.6	51.7	91.6
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	60	—	—	—	—	—	60	31.2	62.9	85.7	6.4	2.3	34.6	55.4	91.7	60	17.3	54.8	77.0	2.4	2.4	22.4	36.8	85.7
2011	Urban	Rate (people)		—	—	—	—	—		36.1	67.5	87.5	8.1	3.5	40.0	58.9	94.2		21.1	58.4	78.3	3.6	3.6	28.7	42.6	86.0
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	359	—	—	—	—	—	359	8.2	46.2	78.8	2.7	0.4	15.4	36.9	93.7	359	12.4	51.5	79.3	3.6	0.8	12.8	34.9	92.1
2011	Rural	Rate (people)		—	—	—	—	—		10.9	53.4	83.2	3.1	0.3	19.2	43.8	94.7		17.1	59.7	85.2	4.8	1.0	17.4	41.9	94.6
2011	Overall	Line		—	—	—	—	—		4,029	6,044	8,058	3,373	2,747	4,396	5,495	10,990		4,454	6,681	8,908	3,652	2,882	4,611	5,764	11,527
2011	Overall	Rate (households)	419	—	—	—	—	—	419	9.9	47.5	79.3	3.0	0.5	16.8	38.3	93.5	419	12.8	51.8	79.1	3.6	0.9	13.5	35.0	91.6
2011	Overall	Rate (people)		—	—	—	—	—		12.9	54.5	83.5	3.5	0.6	20.8	45.0	94.7		17.4	59.6	84.7	4.7	1.2	18.3	41.9	93.9
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	60	—	—	—	—	—	60	12.0	34.1	59.4	8.6	0.0	13.7	28.4	74.3	60	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		14.7	40.3	68.5	10.3	0.0	15.9	31.0	82.6		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	360	—	—	—	—	—	360	10.6	49.2	73.0	4.9	1.6	19.1	38.6	87.1	360	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		12.5	54.2	78.1	5.5	2.2	22.8	43.4	90.4		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,185	6,277	8,370	3,543	2,844	4,551	5,689	11,378		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	420	—	—	—	—	—	420	10.8	47.4	71.3	5.3	1.4	18.4	37.4	85.5	420	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		12.8	52.5	77.0	6.0	1.9	22.0	41.9	89.5		—	—	—	—	—	—	—	—

Figure 13 (Kampong Chhnang): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
				Natl. pov. line			Intl. 2005 PPP			Natl. poverty line				Intl. 2005 PPP					Natl. poverty line				Intl. 2005 PPP			
			n	100%	150%	200%	$1.25	$2.50	*n*	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	*n*	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	70	17.4	36.7	61.0	18.7	65.1	70	—	—	—	—	—	—	—	—	70	24.3	59.7	77.4	9.5	13.2	40.1	61.4	92.3
2004	Urban	Rate (people)		21.8	44.7	64.5	23.5	68.2		—	—	—	—	—	—	—	—		30.7	65.1	78.7	11.8	16.7	47.6	66.3	92.5
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	360	32.6	61.6	80.3	36.9	82.0	360	—	—	—	—	—	—	—	—	360	52.4	81.2	91.3	23.5	30.8	64.1	82.1	99.1
2004	Rural	Rate (people)		39.9	69.6	85.9	44.7	87.2		—	—	—	—	—	—	—	—		61.1	87.8	94.3	30.8	39.1	72.5	88.2	99.5
2004	Overall	Line		1,775	2,663	3,551	1,856	3,713		—	—	—	—	—	—	—	—		2,431	3,647	4,863	1,708	1,848	2,957	3,696	7,391
2004	Overall	Rate (households)	430	31.1	59.0	78.3	35.0	80.3	430	—	—	—	—	—	—	—	—	430	49.6	79.0	89.9	22.1	29.0	61.7	80.0	98.4
2004	Overall	Rate (people)		37.9	66.8	83.5	42.3	85.1		—	—	—	—	—	—	—	—		57.7	85.2	92.5	28.7	36.6	69.7	85.8	98.7
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	0.0	8.0	24.2	0.0	16.2	40	2.7	29.7	40.2	0.0	0.0	13.6	26.9	79.5	40	0.0	16.2	34.8	0.0	0.0	0.0	8.2	58.6
2009	Urban	Rate (people)		0.0	10.3	27.0	0.0	18.2		3.2	32.3	43.1	0.0	0.0	15.9	29.7	79.1		0.0	18.2	39.4	0.0	0.0	0.0	8.5	61.4
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	400	11.0	34.8	60.3	4.3	43.8	400	17.7	43.6	63.5	8.6	5.9	24.7	39.0	84.8	400	17.5	50.4	70.6	8.9	4.1	22.7	38.9	85.1
2009	Rural	Rate (people)		14.8	41.5	67.3	6.1	50.7		22.0	49.6	69.4	11.6	8.0	30.0	44.6	88.0		22.3	56.5	76.1	12.2	5.8	28.4	44.8	89.0
2009	Overall	Line		3,235	4,852	6,470	2,658	5,317		3,572	5,358	7,143	2,897	2,528	4,045	5,056	10,112		3,946	5,919	7,892	3,150	2,644	4,231	5,288	10,577
2009	Overall	Rate (households)	440	10.1	32.6	57.4	3.9	41.5	440	16.4	42.5	61.5	7.9	5.4	23.7	38.0	84.3	440	16.1	47.6	67.7	8.1	3.7	20.8	36.3	82.9
2009	Overall	Rate (people)		13.4	38.7	63.7	5.5	47.8		20.2	48.1	67.0	10.5	7.3	28.7	43.3	87.2		20.3	53.1	72.8	11.1	5.2	25.8	41.6	86.5
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—	—	—	—	20	10.1	44.7	80.2	10.1	5.3	20.1	30.2	94.9	20	10.1	30.1	60.0	5.0	0.0	10.1	20.1	75.0
2011	Urban	Rate (people)		—	—	—	—	—		7.4	40.0	81.9	7.4	3.9	20.7	28.1	95.0		7.4	35.4	58.5	3.7	0.0	7.4	20.8	70.8
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	100	—	—	—	—	—	100	25.1	62.0	78.5	16.4	5.4	33.6	53.1	90.2	100	25.9	65.8	80.3	14.7	2.8	28.5	53.1	89.2
2011	Rural	Rate (people)		—	—	—	—	—		32.6	70.4	83.2	21.9	6.9	41.6	62.6	94.4		32.2	73.8	86.8	18.9	4.1	35.0	63.6	93.6
2011	Overall	Line		—	—	—	—	—		4,033	6,050	8,067	3,376	2,750	4,400	5,501	11,001		4,456	6,684	8,912	3,653	2,883	4,613	5,766	11,532
2011	Overall	Rate (households)	120	—	—	—	—	—	120	23.7	60.5	78.6	15.9	5.4	32.4	51.1	90.6	120	24.5	62.7	78.5	13.8	2.6	26.9	50.2	87.9
2011	Overall	Rate (people)		—	—	—	—	—		30.5	67.9	83.1	20.7	6.7	39.8	59.7	94.5		30.1	70.6	84.4	17.6	3.8	32.7	60.1	91.7
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	30	—	—	—	—	—	30	2.7	29.5	46.2	0.0	0.0	10.0	21.2	69.7	30	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		5.0	35.4	53.6	0.0	0.0	13.8	28.7	76.8		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	90	—	—	—	—	—	90	19.6	52.6	70.3	11.1	4.7	21.8	44.6	81.0	90	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		23.9	57.8	71.4	13.9	4.9	26.3	50.7	80.0		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,221	6,331	8,442	3,574	2,869	4,590	5,738	11,475		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	120	—	—	—	—	—	120	17.3	49.5	67.0	9.6	4.0	20.2	41.5	79.5	120	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		21.0	54.4	68.7	11.8	4.1	24.4	47.3	79.5		—	—	—	—	—	—	—	—

Figure 13 (Kampong Spueu): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-def n	100%	150%	200%	$1.25	$2.50	Gov n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	WB n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	69	16.7	39.8	56.6	18.3	56.6	69	—	—	—	—	—	—	—	—	69	28.0	55.6	79.1	13.5	13.5	41.3	59.5	93.5
2004	Urban	Rate (people)		17.4	42.2	55.8	18.7	55.8		—	—	—	—	—	—	—	—		30.0	54.5	80.3	15.6	15.6	42.5	59.9	95.2
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	580	55.1	80.6	88.8	58.9	89.8	580	—	—	—	—	—	—	—	—	580	72.3	90.5	96.8	42.6	48.5	83.7	91.4	99.2
2004	Rural	Rate (people)		60.5	83.4	90.1	64.1	90.9		—	—	—	—	—	—	—	—		77.7	92.5	97.4	48.5	54.6	87.1	93.2	99.6
2004	Overall	Line		1,768	2,652	3,536	1,849	3,697		—	—	—	—	—	—	—	—		2,424	3,635	4,847	1,701	1,842	2,947	3,684	7,367
2004	Overall	Rate (households)	649	52.3	77.7	86.5	55.9	87.4	649	—	—	—	—	—	—	—	—	649	69.1	88.0	95.5	40.5	45.9	80.6	89.0	98.8
2004	Overall	Rate (people)		57.2	80.3	87.5	60.7	88.2		—	—	—	—	—	—	—	—		74.1	89.6	96.1	46.0	51.6	83.7	90.7	99.3
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	9.9	35.3	55.3	2.4	50.6	40	35.4	57.9	67.8	20.1	14.9	45.6	57.9	87.8	40	17.5	52.9	65.3	7.3	2.4	25.3	48.2	73.0
2009	Urban	Rate (people)		13.9	39.5	55.2	2.5	51.6		39.8	59.5	66.5	22.4	17.5	46.8	59.5	88.6		20.8	53.7	64.8	8.9	2.5	29.0	50.1	71.9
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	559	15.3	43.6	68.0	6.3	51.9	559	26.9	55.8	73.2	11.7	8.6	34.5	51.2	89.8	559	26.9	58.3	77.7	12.1	6.1	31.4	48.4	90.9
2009	Rural	Rate (people)		19.1	51.0	74.8	8.0	59.5		32.4	63.0	78.7	14.3	11.0	40.7	58.6	92.5		32.6	65.5	82.6	15.3	7.8	37.8	55.6	93.0
2009	Overall	Line		3,230	4,844	6,459	2,654	5,308		3,558	5,337	7,116	2,885	2,518	4,030	5,037	10,074		3,938	5,907	7,876	3,142	2,639	4,222	5,278	10,556
2009	Overall	Rate (households)	599	14.9	43.0	67.1	6.0	51.8	599	27.6	56.0	72.8	12.3	9.1	35.3	51.7	89.7	599	26.2	57.9	76.9	11.8	5.9	31.0	48.4	89.6
2009	Overall	Rate (people)		18.7	50.1	73.4	7.6	58.9		33.0	62.8	77.8	14.9	11.4	41.2	58.7	92.2		31.8	64.7	81.4	14.8	7.4	37.2	55.2	91.6
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—	—	—	—	20	10.0	44.6	59.8	5.1	0.0	20.1	29.9	90.7	20	4.9	29.6	69.7	4.9	0.0	4.9	14.8	84.9
2011	Urban	Rate (people)		—	—	—	—	—		11.4	50.0	68.8	6.4	0.0	22.7	31.8	95.2		6.1	32.6	72.0	6.1	0.0	6.1	17.3	85.6
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	129	—	—	—	—	—	129	23.0	64.2	85.6	12.9	3.3	32.1	57.1	94.3	129	23.9	71.2	87.6	13.5	4.8	30.0	52.5	97.0
2011	Rural	Rate (people)		—	—	—	—	—		26.9	69.0	87.3	16.5	4.4	36.0	62.1	95.6		28.5	76.0	90.3	17.0	6.5	33.8	58.5	97.7
2011	Overall	Line		—	—	—	—	—		4,023	6,035	8,047	3,370	2,744	4,390	5,487	10,974		4,452	6,678	8,904	3,651	2,880	4,609	5,761	11,522
2011	Overall	Rate (households)	149	—	—	—	—	—	149	22.0	62.7	83.7	12.3	3.0	31.2	55.1	94.0	149	22.5	68.1	86.3	12.9	4.4	28.1	49.6	96.1
2011	Overall	Rate (people)		—	—	—	—	—		25.7	67.6	86.0	15.8	4.0	35.1	59.8	95.6		26.8	72.8	88.9	16.2	6.1	31.8	55.4	96.8
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	30	—	—	—	—	—	30	22.4	61.3	74.1	11.1	0.0	26.1	37.1	89.5	30	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		25.3	65.7	77.6	13.8	0.0	31.0	45.5	90.1		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	150	—	—	—	—	—	150	21.2	60.3	84.3	12.2	6.3	29.1	50.3	94.1	150	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		26.3	66.2	86.9	14.8	8.1	34.6	56.0	96.7		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,190	6,285	8,380	3,548	2,848	4,557	5,696	11,392		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	180	—	—	—	—	—	180	21.4	60.4	83.0	12.1	5.6	28.7	48.6	93.5	180	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		26.2	66.1	85.8	14.7	7.1	34.2	54.7	95.9		—	—	—	—	—	—	—	—

Figure 13 (Kampong Thum): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
			n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00	n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00
2004	Urban	Line	80	1,952	2,928	3,904	2,042	4,084	80	—	—	—	—	—	—	—	—	80	2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	80	53.5	73.9	80.7	55.8	82.1	80	—	—	—	—	—	—	—	—	80	64.4	82.1	89.7	42.1	47.2	75.4	82.1	97.4
2004	Urban	Rate (people)		55.2	74.6	80.9	56.8	82.9		—	—	—	—	—	—	—	—		65.6	83.4	90.1	45.2	50.1	75.4	83.4	98.0
2004	Rural	Line	500	1,753	2,630	3,506	1,833	3,666	500	—	—	—	—	—	—	—	—	500	2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	500	48.1	74.6	86.9	49.5	88.9	500	—	—	—	—	—	—	—	—	500	66.3	86.5	94.3	37.6	43.1	78.2	87.1	99.1
2004	Rural	Rate (people)		52.1	78.0	88.2	53.4	90.0		—	—	—	—	—	—	—	—		71.1	88.4	95.4	42.9	48.9	81.2	88.8	99.2
2004	Overall	Line	580	1,772	2,658	3,544	1,853	3,706	580	—	—	—	—	—	—	—	—	580	2,428	3,642	4,856	1,705	1,845	2,952	3,690	7,380
2004	Overall	Rate (households)	580	48.7	74.5	86.3	50.1	88.2	580	—	—	—	—	—	—	—	—	580	66.1	86.0	93.8	38.0	43.5	77.9	86.6	98.9
2004	Overall	Rate (people)		52.4	77.7	87.5	53.8	89.4		—	—	—	—	—	—	—	—		70.6	88.0	94.9	43.1	49.0	80.6	88.3	99.1
2009	Urban	Line	40	3,458	5,187	6,916	2,842	5,683	40	4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321	40	4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	0.0	8.3	13.5	0.0	8.3	40	5.0	25.4	53.8	0.0	0.0	8.3	22.1	69.6	40	3.3	8.3	21.2	0.0	0.0	5.8	8.3	58.1
2009	Urban	Rate (people)		0.0	11.0	16.2	0.0	11.0		6.1	27.4	62.0	0.0	0.0	11.0	24.6	78.2		4.8	11.0	23.2	0.0	0.0	7.9	11.0	65.8
2009	Rural	Line	520	3,213	4,820	6,426	2,640	5,281	520	3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889	520	3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	520	25.5	57.5	78.0	12.7	64.1	520	33.5	64.0	81.7	17.6	10.9	42.3	61.0	91.0	520	36.5	68.0	83.9	21.3	10.8	41.9	59.3	91.9
2009	Rural	Rate (people)		29.7	61.4	81.6	15.2	68.2		37.6	68.4	84.2	21.2	13.3	47.2	65.6	93.5		40.5	72.3	86.5	24.7	12.8	46.1	63.7	93.6
2009	Overall	Line	560	3,225	4,838	6,451	2,650	5,301	560	3,536	5,305	7,073	2,866	2,503	4,005	5,006	10,012	560	3,932	5,898	7,864	3,136	2,635	4,216	5,270	10,539
2009	Overall	Rate (households)	560	24.2	55.0	74.8	12.1	61.4	560	32.0	62.1	80.3	16.7	10.4	40.6	59.0	89.9	560	34.9	65.0	80.7	20.3	10.2	40.1	56.7	90.2
2009	Overall	Rate (people)		28.2	58.9	78.3	14.5	65.3		36.0	66.4	83.1	20.1	12.7	45.3	63.5	92.7		38.7	69.2	83.4	23.5	12.2	44.2	61.0	92.2
2011	Urban	Line	20	—	—	—	—	—	20	4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395	20	4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—	—	—	—	20	10.3	20.6	59.6	0.0	0.0	10.3	14.9	79.7	20	4.4	14.4	48.9	0.0	0.0	10.0	14.4	63.3
2011	Urban	Rate (people)		—	—	—	—	—		16.1	30.6	69.7	0.0	0.0	16.1	24.6	85.6		8.3	24.0	59.6	0.0	0.0	15.7	24.0	74.1
2011	Rural	Line	130	—	—	—	—	—	130	3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782	130	4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	130	—	—	—	—	—	130	17.2	58.6	75.5	6.7	0.9	23.6	45.3	88.3	130	17.4	59.6	77.0	7.9	0.0	20.7	46.2	87.9
2011	Rural	Rate (people)		—	—	—	—	—		19.2	64.9	81.8	7.3	1.1	26.2	50.9	91.4		20.2	67.1	83.7	9.0	0.0	24.2	53.2	91.1
2011	Overall	Line	150	—	—	—	—	—	150	3,995	5,992	7,989	3,351	2,724	4,358	5,448	10,896	150	4,440	6,660	8,880	3,644	2,873	4,596	5,745	11,490
2011	Overall	Rate (households)	150	—	—	—	—	—	150	16.8	56.5	74.7	6.3	0.8	22.8	43.6	87.8	150	16.7	57.1	75.5	7.5	0.0	20.1	44.5	86.6
2011	Overall	Rate (people)		—	—	—	—	—		19.1	63.4	81.3	7.0	1.0	25.7	49.7	91.1		19.7	65.3	82.6	8.6	0.0	23.9	52.0	90.4
2012	Urban	Line	10	—	—	—	—	—	10	5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742	10	—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	10	—	—	—	—	—	10	20.4	59.8	89.8	10.0	10.0	20.4	49.8	89.8	10	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		29.8	64.6	89.4	10.4	10.4	29.8	56.3	89.4		—	—	—	—	—	—	—	—
2012	Rural	Line	130	—	—	—	—	—	130	4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064	130	—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	130	—	—	—	—	—	130	23.2	63.0	79.7	14.3	5.6	30.9	52.6	96.0	130	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		28.0	68.4	83.2	17.3	7.3	34.7	58.8	96.3		—	—	—	—	—	—	—	—
2012	Overall	Line	140	—	—	—	—	—	140	4,171	6,257	8,343	3,532	2,835	4,536	5,671	11,341	140	—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	140	—	—	—	—	—	140	22.9	62.7	80.7	13.8	6.0	29.8	52.3	95.3	140	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		28.2	68.0	83.8	16.6	7.6	34.2	58.5	95.6		—	—	—	—	—	—	—	—

Figure 13 (Kampot): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
			n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	n	Natl. poverty line 100%	150%	200%	Median	$1.25	Intl. 2005 PPP $2.00	$2.50	$5.00	n	Natl. poverty line 100%	150%	200%	Median	$1.25	Intl. 2005 PPP $2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	20	34.9	80.0	85.1	39.9	90.1	20	—	—	—	—	—	—	—	—	20	75.0	90.0	95.1	24.9	34.8	85.0	90.0	100.0
2004	Urban	Rate (people)		43.9	88.1	90.9	50.4	92.7		—	—	—	—	—	—	—	—		86.2	97.2	99.1	33.8	44.7	94.5	97.2	100.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	477	25.1	56.7	77.4	28.4	79.7	477	—	—	—	—	—	—	—	—	477	45.7	75.1	87.8	17.9	22.8	57.6	76.1	97.7
2004	Rural	Rate (people)		29.5	61.6	81.3	33.0	83.5		—	—	—	—	—	—	—	—		50.8	79.7	91.0	22.1	27.7	63.2	80.8	98.5
2004	Overall	Line		1,760	2,640	3,520	1,840	3,680		—	—	—	—	—	—	—	—		2,415	3,622	4,829	1,693	1,835	2,936	3,670	7,340
2004	Overall	Rate (households)	497	25.4	57.4	77.6	28.7	80.0	497	—	—	—	—	—	—	—	—	497	46.5	75.6	88.0	18.1	23.2	58.4	76.5	97.8
2004	Overall	Rate (people)		30.0	62.5	81.6	33.6	83.8		—	—	—	—	—	—	—	—		52.0	80.3	91.3	22.5	28.3	64.3	81.3	98.6
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	4.7	24.8	42.8	2.0	32.8	40	17.5	39.6	63.0	4.7	4.7	22.2	37.5	86.7	40	12.0	40.1	54.3	4.7	2.0	16.8	32.8	86.8
2009	Urban	Rate (people)		5.5	32.0	50.6	2.4	41.5		20.7	46.9	67.4	5.5	5.5	27.9	44.9	90.7		14.2	48.5	63.4	5.5	2.4	21.6	39.9	91.8
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	479	11.1	42.1	69.0	4.0	50.8	479	20.3	54.4	78.1	8.9	4.1	29.2	49.6	92.9	479	22.0	58.7	80.2	9.0	3.6	28.5	49.8	91.8
2009	Rural	Rate (people)		14.5	48.8	73.4	5.5	56.7		24.8	59.5	81.0	11.4	5.6	34.6	55.2	94.8		27.5	64.4	83.5	11.9	4.8	34.2	56.2	93.8
2009	Overall	Line		3,234	4,850	6,467	2,657	5,314		3,564	5,346	7,128	2,890	2,522	4,036	5,045	10,090		3,944	5,916	7,888	3,148	2,643	4,229	5,286	10,571
2009	Overall	Rate (households)	519	10.6	40.8	67.0	3.8	49.5	519	20.1	53.3	76.9	8.6	4.2	28.7	48.7	92.5	519	21.2	57.3	78.2	8.7	3.4	27.6	48.5	91.4
2009	Overall	Rate (people)		13.8	47.4	71.5	5.2	55.4		24.5	58.4	79.9	10.9	5.6	34.1	54.3	94.5		26.4	63.1	81.8	11.4	4.6	33.1	54.8	93.6
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—	—	—	—	20	35.2	70.8	85.2	19.8	9.6	40.1	65.4	95.2	20	24.8	70.7	90.0	14.5	0.0	24.8	55.2	100.0
2011	Urban	Rate (people)		—	—	—	—	—		49.2	77.0	91.0	28.6	13.1	51.9	73.1	97.4		38.0	77.0	94.5	21.9	0.0	38.0	65.7	100.0
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	100	—	—	—	—	—	100	18.0	42.9	68.7	2.9	0.0	22.8	38.9	90.5	100	13.8	42.8	72.5	2.0	0.0	16.8	33.6	90.5
2011	Rural	Rate (people)		—	—	—	—	—		22.0	50.4	75.6	3.8	0.0	28.1	46.2	92.6		17.2	51.0	78.9	2.5	0.0	21.9	40.7	93.1
2011	Overall	Line		—	—	—	—	—		4,055	6,083	8,111	3,390	2,765	4,425	5,531	11,062		4,465	6,698	8,931	3,659	2,889	4,623	5,778	11,556
2011	Overall	Rate (households)	120	—	—	—	—	—	120	19.4	45.2	70.0	4.3	0.8	24.2	41.1	90.9	120	14.7	45.1	73.9	3.0	0.0	17.5	35.4	91.3
2011	Overall	Rate (people)		—	—	—	—	—		24.9	53.2	77.3	6.5	1.4	30.6	49.1	93.1		19.4	53.7	80.6	4.5	0.0	23.6	43.3	93.9
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	40	—	—	—	—	—	40	14.9	44.1	72.2	4.9	0.0	14.9	26.8	92.7	40	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		20.2	47.8	79.0	9.6	0.0	20.2	31.3	95.6		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	120	—	—	—	—	—	120	11.2	48.8	72.0	6.0	1.6	16.9	38.0	92.9	120	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		13.3	54.6	75.2	7.5	1.6	20.5	43.1	95.9		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,182	6,272	8,363	3,540	2,842	4,548	5,685	11,369		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	160	—	—	—	—	—	160	11.7	48.2	72.0	5.8	1.4	16.7	36.5	92.9	160	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		14.1	53.8	75.7	7.7	1.5	20.5	41.7	95.8		—	—	—	—	—	—	—	—

Figure 13 (Kandaal): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty					Government-definition poverty									World-Bank-definition poverty								
			n	100%	150%	200%	$1.25	$2.50	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	60	8.0	34.4	57.6	11.0	59.3	60	—	—	—	—	—	—	—	—	60	22.6	46.0	65.9	4.8	6.3	32.6	47.6	86.5
2004	Urban	Rate (people)		9.3	36.6	59.5	12.7	61.0		—	—	—	—	—	—	—	—		23.0	49.8	69.0	5.3	7.5	35.3	51.0	90.3
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	1,018	18.1	50.2	72.1	20.5	75.0	1,018	—	—	—	—	—	—	—	—	1,018	37.2	70.7	87.4	11.6	16.9	52.7	71.2	96.8
2004	Rural	Rate (people)		23.1	56.4	77.7	25.8	80.1		—	—	—	—	—	—	—	—		44.4	76.7	90.9	15.1	21.8	60.1	77.2	97.8
2004	Overall	Line		1,765	2,647	3,530	1,845	3,691		—	—	—	—	—	—	—	—		2,420	3,630	4,840	1,698	1,839	2,943	3,678	7,357
2004	Overall	Rate (households)	1,078	17.5	49.3	71.3	20.0	74.1	1,078	—	—	—	—	—	—	—	—	1,078	36.4	69.3	86.2	11.2	16.3	51.5	69.8	96.2
2004	Overall	Rate (people)		22.3	55.2	76.6	25.1	79.0		—	—	—	—	—	—	—	—		43.2	75.1	89.6	14.5	21.0	58.6	75.7	97.4
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	159	1.8	16.0	31.0	0.6	21.4	159	11.7	29.8	50.1	4.3	3.1	19.2	29.2	78.7	159	3.1	24.2	42.5	1.8	0.6	6.8	18.3	63.2
2009	Urban	Rate (people)		2.4	18.8	34.8	1.2	24.8		14.2	34.4	54.9	5.1	3.6	22.0	33.7	82.6		3.4	28.1	47.5	2.4	1.2	8.2	21.2	67.8
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	917	4.9	23.2	43.1	1.8	29.1	917	8.9	32.0	55.5	3.0	1.5	14.2	27.7	78.3	917	9.6	33.3	57.2	3.7	1.3	13.4	25.0	77.9
2009	Rural	Rate (people)		6.6	27.3	49.1	2.7	33.9		11.3	36.8	61.0	4.1	2.2	17.8	32.2	82.2		12.1	38.5	62.8	5.0	1.8	16.3	28.9	82.3
2009	Overall	Line		3,248	4,872	6,496	2,669	5,338		3,626	5,439	7,252	2,944	2,566	4,106	5,133	10,266		3,965	5,948	7,931	3,171	2,657	4,252	5,315	10,629
2009	Overall	Rate (households)	1,076	4.4	22.2	41.4	1.6	28.0	1,076	9.3	31.7	54.6	3.2	1.8	14.9	28.0	78.4	1,076	8.7	32.0	55.1	3.4	1.2	12.5	24.0	75.8
2009	Overall	Rate (people)		6.0	26.1	47.1	2.5	32.6		11.8	36.4	60.0	4.2	2.4	18.5	32.5	82.2		10.8	37.0	60.6	4.6	1.7	15.2	27.8	80.2
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	80	—	—	—	—	—	80	15.9	42.4	61.8	7.8	4.9	21.8	31.2	77.9	80	11.8	27.1	54.4	6.1	3.2	11.8	24.1	73.9
2011	Urban	Rate (people)		—	—	—	—	—		21.2	52.4	69.9	13.0	9.8	27.7	38.5	84.0		18.0	33.3	61.1	11.1	7.1	18.0	29.8	79.1
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	218	—	—	—	—	—	218	10.9	41.9	68.0	2.8	0.8	16.8	35.2	87.9	218	11.0	43.9	70.9	4.7	0.8	13.6	31.7	90.2
2011	Rural	Rate (people)		—	—	—	—	—		14.2	49.3	75.0	3.2	0.9	21.1	41.7	92.3		14.6	53.2	78.6	6.7	0.8	17.4	39.0	94.4
2011	Overall	Line		—	—	—	—	—		4,102	6,154	8,205	3,419	2,797	4,476	5,595	11,190		4,485	6,727	8,969	3,670	2,902	4,642	5,803	11,606
2011	Overall	Rate (households)	298	—	—	—	—	—	298	11.7	42.0	67.0	3.5	1.5	17.6	34.5	86.4	298	11.1	41.3	68.3	4.9	1.2	13.3	30.5	87.7
2011	Overall	Rate (people)		—	—	—	—	—		15.3	49.8	74.2	4.7	2.2	22.1	41.2	91.0		15.1	50.2	75.9	7.4	1.8	17.5	37.6	92.1
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	50	—	—	—	—	—	50	3.2	28.7	43.1	0.0	0.0	5.2	20.1	81.3	50	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		4.0	28.4	43.5	0.0	0.0	4.9	21.5	78.9		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	210	—	—	—	—	—	210	11.8	47.0	70.7	4.1	1.5	17.7	32.4	88.1	210	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		15.0	53.1	76.2	5.8	2.3	21.2	36.3	91.2		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,210	6,315	8,420	3,565	2,862	4,579	5,723	11,447		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	260	—	—	—	—	—	260	10.5	44.2	66.6	3.5	1.3	15.8	30.6	87.1	260	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		13.5	49.5	71.5	5.0	2.0	18.9	34.2	89.4		—	—	—	—	—	—	—	—

Figure 13 (Kaoh Kong): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	n	Old: Natl. 100%	150%	200%	Intl $1.25	$2.50	n	Gov: Natl. 100%	150%	200%	Median	Intl $1.25	$2.00	$2.50	$5.00	n	WB: Natl. 100%	150%	200%	Median	Intl $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	50	22.0	53.7	67.9	25.2	67.9	50	—	—	—	—	—	—	—	—	50	39.2	60.8	74.8	12.4	17.2	57.5	62.8	89.9
2004	Urban	Rate (people)		24.3	58.5	72.0	28.2	72.0		—	—	—	—	—	—	—	—		44.2	64.2	77.9	14.0	20.6	61.4	66.6	92.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	120	28.9	57.1	71.0	31.1	72.5	120	—	—	—	—	—	—	—	—	120	48.6	72.1	86.9	20.7	23.5	62.0	72.1	93.7
2004	Rural	Rate (people)		32.2	60.3	73.0	34.1	74.9		—	—	—	—	—	—	—	—		53.6	73.9	89.5	25.2	28.3	64.6	73.9	96.1
2004	Overall	Line		1,795	2,693	3,590	1,877	3,754		—	—	—	—	—	—	—	—		2,453	3,679	4,906	1,728	1,864	2,983	3,728	7,457
2004	Overall	Rate (households)	170	27.6	56.4	70.4	30.0	71.6	170	—	—	—	—	—	—	—	—	170	46.8	69.9	84.6	19.1	22.3	61.1	70.3	93.0
2004	Overall	Rate (people)		30.6	59.9	72.8	32.8	74.3		—	—	—	—	—	—	—	—		51.6	71.8	87.1	22.8	26.7	64.0	72.3	95.2
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	4.3	19.4	29.4	0.0	24.4	40	15.7	29.7	37.6	6.4	2.2	22.3	24.8	66.6	40	10.8	24.4	32.3	4.3	0.0	17.3	24.4	61.2
2009	Urban	Rate (people)		4.4	16.7	28.8	0.0	24.2		14.2	25.4	37.4	6.3	2.4	18.7	20.9	73.0		10.8	24.2	30.7	4.4	0.0	15.3	24.2	64.9
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	80	12.2	46.7	61.8	6.8	54.3	80	15.8	53.9	66.3	7.7	4.0	32.9	48.5	81.9	80	32.6	55.3	75.5	12.4	4.0	36.4	49.8	87.7
2009	Rural	Rate (people)		21.0	57.5	71.8	13.3	64.3		21.4	62.8	74.6	11.1	6.2	42.7	58.2	86.6		41.8	63.7	82.3	21.2	6.2	45.9	60.7	91.9
2009	Overall	Line		3,286	4,929	6,571	2,700	5,400		3,756	5,635	7,513	3,057	2,659	4,254	5,318	10,635		4,020	6,031	8,041	3,229	2,694	4,311	5,388	10,776
2009	Overall	Rate (households)	120	9.8	38.4	51.9	4.7	45.2	120	15.7	46.3	57.3	7.3	3.4	29.6	41.1	77.1	120	25.9	45.8	62.3	9.9	2.8	30.5	42.1	79.6
2009	Overall	Rate (people)		16.1	45.4	59.0	9.3	52.4		19.2	51.3	63.2	9.6	5.1	35.4	46.8	82.4		32.6	51.9	67.0	16.2	4.4	36.8	49.9	83.9
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	10	—	—	—	—	—	10	10.0	90.1	90.1	0.0	0.0	10.0	90.1	100.0	10	0.0	40.0	90.0	0.0	0.0	0.0	10.0	90.0
2011	Urban	Rate (people)		—	—	—	—	—		13.3	93.4	93.4	0.0	0.0	13.3	93.4	100.0		0.0	46.7	93.3	0.0	0.0	0.0	13.3	93.3
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	20	—	—	—	—	—	20	10.4	30.9	41.2	0.0	0.0	15.6	30.9	71.1	20	15.5	31.1	46.3	5.2	0.0	15.5	31.1	66.3
2011	Rural	Rate (people)		—	—	—	—	—		21.7	48.4	59.0	0.0	0.0	31.4	48.4	82.8		31.4	48.8	62.3	11.9	0.0	31.4	48.8	78.8
2011	Overall	Line		—	—	—	—	—		4,238	6,357	8,476	3,505	2,890	4,624	5,780	11,560		4,542	6,814	9,085	3,703	2,939	4,702	5,878	11,756
2011	Overall	Rate (households)	30	—	—	—	—	—	30	10.3	49.3	56.4	0.0	0.0	13.8	49.3	80.1	30	10.7	33.8	59.8	3.6	0.0	10.7	24.6	73.6
2011	Overall	Rate (people)		—	—	—	—	—		19.2	61.8	69.2	0.0	0.0	26.0	61.8	88.0		22.1	48.1	71.5	8.4	0.0	22.1	38.3	83.1
2012	Urban	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	10	—	—	—	—	—	10	10.2	50.8	81.1	0.0	0.0	10.2	50.8	91.1	10	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		13.5	54.0	83.0	0.0	0.0	13.5	54.0	94.1		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	11	—	—	—	—	—	11	10.2	50.8	81.1	0.0	0.0	10.2	50.8	91.1	11	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		13.5	54.0	83.0	0.0	0.0	13.5	54.0	94.1		—	—	—	—	—	—	—	—

Figure 13 (Kracheh): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty							Government-definition poverty										World-Bank-definition poverty								
			n	Natl. pov. line			Intl. 2005 PPP		*n*	Natl. poverty line			Median	Intl. 2005 PPP				*n*	Natl. poverty line			Median	Intl. 2005 PPP			
				100%	150%	200%	$1.25	$2.50		100%	150%	200%		$1.25	$2.00	$2.50	$5.00		100%	150%	200%		$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	140	27.1	56.1	71.5	28.6	72.7	140	—	—	—	—	—	—	—	—	140	39.0	69.9	85.7	23.4	25.6	55.8	70.5	92.7
2004	Urban	Rate (people)		32.9	63.8	77.9	34.4	79.2		—	—	—	—	—	—	—	—		46.6	76.5	89.9	30.2	32.3	63.2	77.0	95.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	140	36.9	67.6	84.2	40.3	84.2	140	—	—	—	—	—	—	—	—	140	53.1	84.1	90.4	25.3	35.0	68.3	84.6	99.4
2004	Rural	Rate (people)		42.2	72.5	86.1	45.9	86.1		—	—	—	—	—	—	—	—		60.8	86.6	90.9	30.9	41.6	75.3	86.9	99.3
2004	Overall	Line		1,830	2,744	3,659	1,914	3,827		—	—	—	—	—	—	—	—		2,490	3,736	4,981	1,763	1,893	3,028	3,785	7,571
2004	Overall	Rate (households)	280	33.2	63.3	79.4	35.9	79.9	280	—	—	—	—	—	—	—	—	280	47.7	78.7	88.7	24.6	31.5	63.6	79.3	96.8
2004	Overall	Rate (people)		38.6	69.2	82.9	41.5	83.4		—	—	—	—	—	—	—	—		55.3	82.7	90.5	30.6	38.0	70.7	83.1	97.7
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	5.2	31.3	53.6	0.0	36.6	40	20.8	51.3	75.9	8.0	5.4	26.2	41.1	87.6	40	15.7	39.2	68.4	5.2	0.0	15.7	36.6	80.6
2009	Urban	Rate (people)		7.2	39.3	62.0	0.0	42.9		28.4	60.1	81.6	9.3	7.6	32.8	48.3	89.5		20.6	45.3	75.8	7.2	0.0	20.6	42.9	84.0
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	240	13.5	47.8	73.0	4.7	59.0	240	16.1	55.9	75.5	6.6	2.9	23.7	48.1	91.6	240	23.9	62.1	83.2	11.0	3.2	31.0	51.5	91.8
2009	Rural	Rate (people)		17.2	56.2	78.3	6.3	66.5		19.7	62.7	80.1	8.4	4.4	28.7	55.6	94.0		29.2	69.5	87.3	14.5	4.2	37.3	59.1	94.4
2009	Overall	Line		3,239	4,859	6,478	2,662	5,323		3,589	5,384	7,179	2,912	2,541	4,065	5,081	10,163		3,952	5,928	7,904	3,157	2,648	4,237	5,296	10,593
2009	Overall	Rate (households)	280	12.5	46.0	70.8	4.2	56.4	280	16.6	55.4	75.6	6.7	3.2	24.0	47.3	91.1	280	22.9	59.5	81.5	10.4	2.9	29.3	49.8	90.5
2009	Overall	Rate (people)		16.2	54.4	76.5	5.6	64.0		20.7	62.4	80.2	8.5	4.8	29.1	54.7	93.4		28.3	66.9	86.1	13.7	3.7	35.5	57.4	93.3
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—	—	—	—	20	31.8	68.8	85.5	13.5	9.0	31.8	68.8	100.0	20	13.2	53.2	78.8	0.0	0.0	13.2	30.9	90.0
2011	Urban	Rate (people)		—	—	—	—	—		43.7	80.4	93.4	19.9	12.1	43.7	80.4	100.0		19.8	65.9	90.6	0.0	0.0	19.8	43.0	96.1
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	40	—	—	—	—	—	40	13.2	44.2	76.1	2.1	0.0	13.2	33.5	92.3	40	12.9	42.2	79.0	8.2	0.0	12.9	25.1	92.3
2011	Rural	Rate (people)		—	—	—	—	—		20.5	54.1	79.6	4.3	0.0	20.5	42.1	94.2		20.1	51.8	84.3	13.9	0.0	20.1	33.5	95.2
2011	Overall	Line		—	—	—	—	—		4,073	6,110	8,146	3,401	2,777	4,444	5,555	11,110		4,473	6,709	8,945	3,663	2,894	4,630	5,788	11,575
2011	Overall	Rate (households)	60	—	—	—	—	—	60	15.5	47.1	77.3	3.5	1.1	15.5	37.7	93.2	60	12.9	43.5	79.0	7.2	0.0	12.9	25.8	92.1
2011	Overall	Rate (people)		—	—	—	—	—		23.4	57.4	81.4	6.3	1.5	23.4	46.9	94.9		20.0	53.6	85.1	12.2	0.0	20.0	34.7	95.4
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	30	—	—	—	—	—	30	0.0	7.0	50.4	0.0	0.0	0.0	3.6	83.7	30	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		0.0	8.4	53.5	0.0	0.0	0.0	4.7	84.5		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	20	—	—	—	—	—	20	0.0	9.0	28.3	0.0	0.0	0.0	9.0	61.3	20	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		0.0	16.5	40.5	0.0	0.0	0.0	16.5	71.8		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,418	6,628	8,837	3,742	3,003	4,805	6,006	12,013		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	50	—	—	—	—	—	50	0.0	8.4	35.9	0.0	0.0	0.0	7.2	69.0	50	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		0.0	13.6	45.1	0.0	0.0	0.0	12.3	76.3		—	—	—	—	—	—	—	—

Figure 13 (Mondol Kiri): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	n	Old-def Natl 100%	150%	200%	Intl 2005 PPP $1.25	$2.50	n	Gov Natl 100%	150%	200%	Median	Intl 2005 $1.25	$2.00	$2.50	$5.00	n	WB Natl 100%	150%	200%	Median	Intl 2005 $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	10	30.0	60.0	80.0	40.0	80.0	10	—	—	—	—	—	—	—	—	10	66.7	100.0	100.0	33.3	33.3	77.8	100.0	100.0
2004	Urban	Rate (people)		33.3	61.1	79.6	38.9	79.6		—	—	—	—	—	—	—	—		62.2	100.0	100.0	40.0	40.0	77.8	100.0	100.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	20	40.0	70.0	80.0	40.0	85.0	20	—	—	—	—	—	—	—	—	20	55.0	85.0	100.0	10.0	20.0	65.0	85.0	100.0
2004	Rural	Rate (people)		54.3	81.4	91.4	54.3	94.3		—	—	—	—	—	—	—	—		67.1	94.3	100.0	21.4	35.7	75.7	94.3	100.0
2004	Overall	Line		1,823	2,734	3,645	1,906	3,812		—	—	—	—	—	—	—	—		2,483	3,724	4,966	1,756	1,887	3,019	3,774	7,548
2004	Overall	Rate (households)	30	37.4	67.4	80.0	40.0	83.7	30	—	—	—	—	—	—	—	—	30	58.2	89.1	100.0	16.4	23.7	68.5	89.1	100.0
2004	Overall	Rate (people)		47.0	74.3	87.3	48.9	89.2		—	—	—	—	—	—	—	—		65.4	96.3	100.0	27.9	37.2	76.4	96.3	100.0
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	19	0.0	11.1	16.6	0.0	16.6	19	10.3	15.7	32.2	5.4	0.0	10.3	15.7	54.2	19	5.5	16.6	16.6	0.0	0.0	11.1	16.6	33.2
2009	Urban	Rate (people)		0.0	16.4	23.4	0.0	23.4		15.5	22.3	42.1	10.3	0.0	15.5	22.3	62.0		10.5	23.4	23.4	0.0	0.0	11.4	23.4	43.2
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	20	5.0	50.0	80.0	0.0	60.0	20	4.8	55.5	86.0	4.8	0.0	15.3	51.0	95.2	20	5.0	65.0	80.0	5.0	0.0	10.0	55.0	95.0
2009	Rural	Rate (people)		5.3	59.3	85.8	0.0	67.3		5.1	62.7	89.3	5.1	0.0	18.2	56.4	97.4		5.3	72.6	85.8	5.3	0.0	12.4	62.0	97.4
2009	Overall	Line		3,229	4,843	6,458	2,653	5,307		3,561	5,342	7,123	2,888	2,521	4,033	5,041	10,083		3,937	5,906	7,874	3,141	2,638	4,221	5,277	10,553
2009	Overall	Rate (households)	39	4.6	47.0	75.2	0.0	56.7	39	5.3	51.8	80.9	4.9	0.0	14.8	47.7	91.4	39	5.0	61.3	75.2	4.6	0.0	10.1	52.1	90.3
2009	Overall	Rate (people)		5.0	56.5	81.8	0.0	64.4		6.0	59.5	85.6	5.6	0.0	18.0	53.6	94.6		5.7	69.4	81.8	5.0	0.0	12.7	59.4	93.8
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—	—	—	—	20	14.8	25.0	50.2	5.0	5.0	14.8	14.8	79.9	20	5.0	14.9	34.9	0.0	0.0	5.0	14.9	50.0
2011	Urban	Rate (people)		—	—	—	—	—		18.8	29.3	56.9	3.6	3.6	18.8	18.8	82.7		3.6	19.1	39.3	0.0	0.0	5.0	19.1	56.0
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	10	—	—	—	—	—	10	0.0	29.3	69.4	0.0	0.0	0.0	29.3	89.9	10	0.0	50.0	70.0	0.0	0.0	10.0	30.0	90.0
2011	Rural	Rate (people)		—	—	—	—	—		0.0	37.2	81.9	0.0	0.0	0.0	37.2	93.3		0.0	55.6	75.6	0.0	0.0	15.6	37.8	86.7
2011	Overall	Line		—	—	—	—	—		4,049	6,074	8,098	3,386	2,761	4,418	5,522	11,044		4,462	6,694	8,925	3,657	2,887	4,619	5,774	11,549
2011	Overall	Rate (households)	30	—	—	—	—	—	30	1.2	29.0	67.8	0.4	0.4	1.2	28.1	89.1	30	0.4	47.1	67.1	0.0	0.0	9.6	28.7	86.7
2011	Overall	Rate (people)		—	—	—	—	—		1.9	36.4	79.4	0.4	0.4	1.9	35.3	92.2		0.4	51.9	72.0	0.0	0.0	14.4	35.9	83.6
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	10	—	—	—	—	—	10	9.9	70.4	90.2	9.9	0.0	9.9	50.2	90.2	10	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		12.1	78.2	92.8	12.1	0.0	12.1	58.5	92.8		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	50	—	—	—	—	—	50	7.8	55.1	82.1	0.0	0.0	17.9	39.5	95.2	50	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		10.1	57.1	84.7	0.0	0.0	25.3	42.7	95.4		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,212	6,318	8,424	3,566	2,863	4,580	5,726	11,451		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	60	—	—	—	—	—	60	8.1	57.6	83.4	1.7	0.0	16.5	41.3	94.4	60	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		10.4	60.2	85.9	1.8	0.0	23.4	44.9	95.0		—	—	—	—	—	—	—	—

Figure 13 (Phnom Penh): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
				Natl. pov. line			Intl. 2005 PPP			Natl. poverty line				Intl. 2005 PPP					Natl. poverty line				Intl. 2005 PPP			
			n	100%	150%	200%	$1.25	$2.50	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		2,351	3,527	4,702	2,459	4,918		—	—	—	—	—	—	—	—		3,361	5,041	6,721	2,681	2,554	4,086	5,108	10,216
2004	Urban	Rate (households)	689	0.9	5.2	14.6	1.6	17.4	689	—	—	—	—	—	—	—	—	689	5.2	17.6	34.5	1.6	1.1	8.1	18.5	69.3
2004	Urban	Rate (people)		1.1	7.0	18.2	2.1	20.7		—	—	—	—	—	—	—	—		7.2	21.0	39.0	2.3	1.7	10.6	22.0	74.0
2004	Rural	Line		2,351	3,527	4,702	2,459	4,918		—	—	—	—	—	—	—	—		3,361	5,041	6,721	2,681	2,554	4,086	5,108	10,216
2004	Rural	Rate (households)	420	7.7	24.7	45.6	9.0	49.0	420	—	—	—	—	—	—	—	—	420	23.2	52.3	68.9	12.9	11.5	36.1	52.8	92.2
2004	Rural	Rate (people)		8.9	27.8	50.4	10.1	53.7		—	—	—	—	—	—	—	—		26.5	57.0	73.5	14.8	13.2	39.9	57.4	93.9
2004	Overall	Line		2,351	3,527	4,702	2,459	4,918		—	—	—	—	—	—	—	—		3,361	5,041	6,721	2,681	2,554	4,086	5,108	10,216
2004	Overall	Rate (households)	1,109	3.9	13.8	28.2	4.8	31.3	1,109	—	—	—	—	—	—	—	—	1,109	13.1	32.9	49.6	6.6	5.7	20.4	33.6	79.3
2004	Overall	Rate (people)		4.6	16.3	32.6	5.7	35.4		—	—	—	—	—	—	—	—		15.8	37.1	54.4	7.9	6.9	23.7	37.8	82.9
2009	Urban	Line		4,185	6,278	8,370	3,439	6,878		6,347	9,521	12,694	5,136	4,492	7,188	8,985	17,970		5,326	7,990	10,653	4,405	3,569	5,711	7,139	14,277
2009	Urban	Rate (households)	1,053	0.8	5.0	15.0	0.3	7.6	1,053	8.1	31.3	57.5	3.5	1.9	12.8	27.1	79.8	1,053	2.2	10.2	25.9	0.9	0.2	2.7	6.7	48.3
2009	Urban	Rate (people)		1.1	6.6	18.8	0.5	9.8		11.0	38.3	63.3	4.9	2.7	16.5	33.4	83.8		2.8	12.9	30.7	1.2	0.4	3.6	8.8	54.0
2009	Rural	Line		4,185	6,278	8,370	3,439	6,878		6,347	9,521	12,694	5,136	4,492	7,188	8,985	17,970		5,326	7,990	10,653	4,405	3,569	5,711	7,139	14,277
2009	Rural	Rate (households)	60	8.3	28.0	56.4	6.7	39.6	60	31.2	79.9	88.3	21.4	13.2	44.6	71.5	100.0	60	18.2	48.1	75.0	11.6	6.7	23.1	39.6	93.4
2009	Rural	Rate (people)		12.1	36.8	63.7	9.8	47.3		39.5	81.2	90.9	28.2	16.5	51.8	73.8	100.0		24.6	55.1	75.8	14.9	9.8	31.4	47.3	95.2
2009	Overall	Line		4,185	6,278	8,370	3,439	6,878		6,347	9,521	12,694	5,136	4,492	7,188	8,985	17,970		5,326	7,990	10,653	4,405	3,569	5,711	7,139	14,277
2009	Overall	Rate (households)	1,113	1.3	6.6	17.8	0.8	9.8	1,113	9.7	34.6	59.5	4.7	2.6	14.9	30.0	81.2	1,113	3.3	12.9	29.3	1.6	0.6	4.1	9.0	51.4
2009	Overall	Rate (people)		1.8	8.6	21.8	1.1	12.2		12.8	41.1	65.1	6.4	3.6	18.8	36.0	84.8		4.3	15.7	33.7	2.1	1.0	5.5	11.4	56.8
2011	Urban	Line		—	—	—	—	—		7,162	10,742	14,323	6,178	4,883	7,814	9,767	19,534		6,014	9,021	12,029	5,172	3,891	6,226	7,782	15,565
2011	Urban	Rate (households)	713	—	—	—	—	—	713	7.4	28.8	51.1	3.6	0.3	10.1	21.8	77.8	713	0.9	9.4	23.0	0.3	0.0	1.6	6.0	41.7
2011	Urban	Rate (people)		—	—	—	—	—		10.1	34.9	57.5	4.9	0.6	13.2	27.2	81.9		1.0	12.3	27.1	0.4	0.0	1.9	8.4	46.9
2011	Rural	Line		—	—	—	—	—		7,162	10,742	14,323	6,178	4,883	7,814	9,767	19,534		6,014	9,021	12,029	5,172	3,891	6,226	7,782	15,565
2011	Rural	Rate (households)	30	—	—	—	—	—	30	16.8	57.0	83.5	10.1	0.0	16.8	43.6	96.7	30	6.6	33.1	63.3	3.2	0.0	10.0	16.7	83.1
2011	Rural	Rate (people)		—	—	—	—	—		20.4	67.3	89.2	12.6	0.0	20.4	54.0	97.7		8.4	39.6	71.7	5.3	0.0	12.4	20.3	85.7
2011	Overall	Line		—	—	—	—	—		7,162	10,742	14,323	6,178	4,883	7,814	9,767	19,534		6,014	9,021	12,029	5,172	3,891	6,226	7,782	15,565
2011	Overall	Rate (households)	743	—	—	—	—	—	743	8.2	31.2	53.8	4.1	0.3	10.6	23.7	79.4	743	1.3	11.4	26.4	0.5	0.0	2.3	6.9	45.2
2011	Overall	Rate (people)		—	—	—	—	—		10.9	37.5	60.0	5.5	0.6	13.8	29.3	83.1		1.5	14.4	30.6	0.8	0.0	2.7	9.3	49.9
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	10	—	—	—	—	—	10	0.0	60.1	60.1	0.0	0.0	0.0	19.6	90.0	10	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		0.0	65.9	65.9	0.0	0.0	0.0	23.9	95.1		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	20	—	—	—	—	—	20	35.1	79.8	100.0	12.5	0.0	45.0	69.9	100.0	20	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		33.5	78.3	100.0	13.1	0.0	45.0	66.0	100.0		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,182	6,274	8,365	3,541	2,843	4,549	5,686	11,371		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	30	—	—	—	—	—	30	30.5	77.2	94.8	10.9	0.0	39.1	63.3	98.7	30	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		29.7	76.8	96.1	11.6	0.0	39.8	61.1	99.4		—	—	—	—	—	—	—	—

Figure 13 (Preah Vihear): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
				Natl. pov. line			Intl. 2005 PPP			Natl. poverty line				Intl. 2005 PPP					Natl. poverty line				Intl. 2005 PPP			
			n	100%	150%	200%	$1.25	$2.50	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	40	48.0	76.9	89.8	55.6	89.8	40	—	—	—	—	—	—	—	—	40	72.5	87.3	96.5	43.1	50.5	80.0	92.9	100.0
2004	Urban	Rate (people)		55.3	84.0	91.2	63.5	91.2		—	—	—	—	—	—	—	—		78.3	90.7	97.2	51.2	59.5	85.9	94.3	100.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	60	50.8	83.7	88.8	52.4	90.5	60	—	—	—	—	—	—	—	—	60	68.8	89.1	100.0	42.3	50.4	84.0	92.2	100.0
2004	Rural	Rate (people)		61.9	87.8	91.4	63.7	92.8		—	—	—	—	—	—	—	—		79.0	90.9	100.0	50.5	59.1	88.1	93.9	100.0
2004	Overall	Line		1,794	2,691	3,588	1,876	3,752		—	—	—	—	—	—	—	—		2,452	3,678	4,904	1,727	1,863	2,981	3,727	7,454
2004	Overall	Rate (households)	100	50.1	82.2	89.1	53.2	90.4	100	—	—	—	—	—	—	—	—	100	69.7	88.7	99.2	42.5	50.4	83.1	92.3	100.0
2004	Overall	Rate (people)		60.5	87.0	91.3	63.6	92.5		—	—	—	—	—	—	—	—		78.8	90.9	99.4	50.7	59.2	87.7	94.0	100.0
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	20	22.6	55.2	55.2	0.0	55.2	20	54.9	63.7	82.6	22.7	11.5	54.9	59.1	91.3	20	38.3	55.2	63.9	17.0	0.0	49.6	55.2	87.0
2009	Urban	Rate (people)		26.8	64.8	64.8	0.0	64.8		64.5	73.5	89.2	26.8	14.2	64.5	68.3	94.1		44.4	64.8	72.6	19.1	0.0	59.7	64.8	92.2
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	100	22.1	70.0	89.0	7.8	77.0	100	34.3	70.0	88.1	15.2	3.9	45.6	67.8	94.6	100	44.4	79.5	93.5	17.1	2.8	49.8	75.8	96.4
2009	Rural	Rate (people)		28.4	76.2	94.5	9.7	83.5		40.5	76.0	92.7	18.2	4.5	54.3	73.0	97.5		51.2	84.9	97.6	22.4	3.3	57.5	81.9	98.7
2009	Overall	Line		3,227	4,840	6,454	2,652	5,303		3,547	5,320	7,093	2,875	2,510	4,016	5,020	10,041		3,934	5,901	7,868	3,138	2,636	4,218	5,273	10,545
2009	Overall	Rate (households)	120	22.1	69.0	86.9	7.3	75.6	120	35.7	69.6	87.7	15.8	4.4	46.3	67.2	94.4	120	44.1	78.0	91.6	17.1	2.6	49.8	74.5	95.8
2009	Overall	Rate (people)		28.3	75.5	92.8	9.2	82.4		42.0	75.8	92.5	18.7	5.1	54.9	72.7	97.3		50.8	83.7	96.2	22.2	3.2	57.6	80.9	98.4
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	10	—	—	—	—	—	10	69.5	90.1	90.1	49.7	29.8	79.8	90.1	100.0	10	60.0	100.0	100.0	40.0	10.0	60.0	90.0	100.0
2011	Urban	Rate (people)		—	—	—	—	—		79.3	92.7	92.7	62.8	37.1	87.0	92.7	100.0		72.2	100.0	100.0	50.0	22.2	72.2	92.6	100.0
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	20	—	—	—	—	—	20	53.3	89.2	94.6	38.9	9.5	53.3	84.8	100.0	20	53.0	89.2	94.6	28.4	4.6	53.0	84.6	100.0
2011	Rural	Rate (people)		—	—	—	—	—		63.0	91.5	95.8	49.1	14.8	63.0	88.9	100.0		62.7	91.5	95.8	38.4	8.1	62.7	88.8	100.0
2011	Overall	Line		—	—	—	—	—		4,024	6,035	8,047	3,370	2,744	4,390	5,487	10,975		4,452	6,678	8,904	3,651	2,880	4,609	5,761	11,521
2011	Overall	Rate (households)	30	—	—	—	—	—	30	54.4	89.3	94.3	39.7	10.9	55.1	85.1	100.0	30	53.5	90.0	95.0	29.2	5.0	53.5	85.0	100.0
2011	Overall	Rate (people)		—	—	—	—	—		64.2	91.6	95.5	50.1	16.5	64.8	89.2	100.0		63.4	92.1	96.1	39.2	9.2	63.4	89.1	100.0
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	20	—	—	—	—	—	20	30.0	55.3	69.9	20.1	0.0	34.9	50.2	84.9	20	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		35.1	59.2	72.2	25.0	0.0	39.2	55.0	86.5		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	40	—	—	—	—	—	40	32.3	69.2	71.6	12.4	4.4	43.7	59.9	85.4	40	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		42.5	76.8	79.6	19.5	6.7	52.9	69.6	89.5		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,219	6,329	8,438	3,572	2,868	4,588	5,735	11,471		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	60	—	—	—	—	—	60	32.0	67.2	71.4	13.5	3.8	42.5	58.5	85.3	60	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		41.3	74.1	78.5	20.3	5.7	50.8	67.4	89.0		—	—	—	—	—	—	—	—

Figure 13 (Prey Veaeng): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
			n	100%	150%	200%	$1.25	$2.50	*n*	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	*n*	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	60	29.4	56.7	76.8	33.1	78.4	60	—	—	—	—	—	—	—	—	60	42.7	75.2	90.3	14.8	17.1	58.3	78.3	95.2
2004	Urban	Rate (people)		33.0	61.8	78.3	36.0	80.2		—	—	—	—	—	—	—	—		47.6	78.1	91.3	16.6	20.4	64.1	81.5	95.9
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	980	31.1	64.9	80.8	34.7	83.2	980	—	—	—	—	—	—	—	—	980	50.0	79.8	92.9	18.9	24.3	66.6	80.5	98.8
2004	Rural	Rate (people)		37.5	71.2	85.2	41.6	87.2		—	—	—	—	—	—	—	—		58.0	85.1	95.0	24.4	30.3	73.2	85.7	99.2
2004	Overall	Line		1,762	2,643	3,524	1,843	3,685		—	—	—	—	—	—	—	—		2,417	3,626	4,834	1,695	1,837	2,939	3,674	7,348
2004	Overall	Rate (households)	1,040	31.0	64.5	80.6	34.6	82.9	1,040	—	—	—	—	—	—	—	—	1,040	49.6	79.6	92.7	18.7	23.9	66.2	80.4	98.6
2004	Overall	Rate (people)		37.3	70.7	84.9	41.3	86.8		—	—	—	—	—	—	—	—		57.5	84.7	94.8	24.1	29.9	72.7	85.5	99.1
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	40	7.6	15.3	25.3	5.1	15.3	40	7.7	25.0	50.5	7.7	7.7	15.0	25.0	74.6	40	10.2	20.4	38.1	7.6	0.0	10.2	12.7	60.4
2009	Urban	Rate (people)		10.8	20.6	32.6	6.5	20.6		11.1	30.9	53.3	11.1	11.1	22.3	30.9	78.4		13.6	24.9	42.4	10.8	0.0	16.4	17.3	68.0
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	960	18.2	47.2	71.0	8.8	55.0	960	27.6	59.0	78.5	14.4	9.5	34.9	53.6	91.7	960	26.7	60.4	81.2	14.6	7.3	33.2	50.0	93.3
2009	Rural	Rate (people)		22.0	52.5	75.5	10.9	60.4		30.8	63.3	82.0	16.9	11.4	38.4	57.5	93.7		30.7	65.4	84.9	17.5	9.1	37.4	54.9	95.3
2009	Overall	Line		3,221	4,832	6,442	2,647	5,294		3,523	5,284	7,046	2,854	2,494	3,990	4,987	9,974		3,926	5,888	7,851	3,129	2,631	4,209	5,261	10,522
2009	Overall	Rate (households)	1,000	17.9	46.2	69.6	8.7	53.8	1,000	27.0	57.9	77.6	14.2	9.4	34.2	52.6	91.1	1,000	26.2	59.2	79.8	14.4	7.1	32.5	48.9	92.3
2009	Overall	Rate (people)		21.6	51.5	74.1	10.8	59.1		30.1	62.2	81.0	16.7	11.4	37.8	56.6	93.1		30.1	64.1	83.5	17.3	8.8	36.6	53.6	94.4
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	19	—	—	—	—	—	19	5.5	42.2	68.0	5.5	0.0	11.0	31.6	84.0	19	5.4	26.7	36.9	0.0	0.0	5.4	10.8	63.3
2011	Urban	Rate (people)		—	—	—	—	—		7.7	49.4	67.0	7.7	0.0	13.1	38.9	87.2		7.5	33.0	45.3	0.0	0.0	7.5	12.9	69.5
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	220	—	—	—	—	—	220	26.7	67.5	84.8	15.0	7.2	33.3	57.4	95.2	220	30.5	71.8	87.5	16.4	6.3	33.7	56.9	96.2
2011	Rural	Rate (people)		—	—	—	—	—		31.1	72.8	87.4	18.2	8.5	38.9	62.8	95.8		36.0	78.6	91.2	19.7	7.5	39.3	63.6	98.1
2011	Overall	Line		—	—	—	—	—		3,993	5,989	7,985	3,350	2,723	4,356	5,445	10,890		4,439	6,659	8,878	3,643	2,872	4,595	5,744	11,488
2011	Overall	Rate (households)	239	—	—	—	—	—	239	25.9	66.6	84.2	14.7	6.9	32.5	56.5	94.8	239	29.6	70.2	85.7	15.8	6.0	32.7	55.2	95.0
2011	Overall	Rate (people)		—	—	—	—	—		30.1	71.8	86.5	17.7	8.2	37.8	61.8	95.4		34.8	76.7	89.3	18.9	7.2	38.0	61.5	96.9
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	20	—	—	—	—	—	20	11.2	23.0	27.2	11.2	0.0	11.2	16.9	51.6	20	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		10.9	22.6	27.9	10.9	0.0	10.9	13.3	54.9		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	20	—	—	—	—	—	20	19.4	35.1	64.6	4.8	0.0	19.4	24.8	80.5	20	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		22.7	38.3	70.9	7.6	0.0	22.7	28.9	85.4		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,346	6,520	8,693	3,680	2,954	4,727	5,909	11,817		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	40	—	—	—	—	—	40	17.2	31.9	54.6	6.5	0.0	17.2	22.7	72.8	40	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		19.4	33.9	58.8	8.5	0.0	19.4	24.5	76.8		—	—	—	—	—	—	—	—

Figure 13 (Pousaat): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

| | | | Old-definition poverty | | | | | | Government-definition poverty | | | | | | | | | World-Bank-definition poverty | | | | | | | | |
| | Urban or Rural | Line or rate for people | | Natl. pov. line | | | Intl. 2005 PPP | | | Natl. poverty line | | | | Intl. 2005 PPP | | | | | Natl. poverty line | | | | Intl. 2005 PPP | | | |
Year		or households	n	100%	150%	200%	$1.25	$2.50	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	100	30.8	55.6	73.7	30.8	77.4	100	—	—	—	—	—	—	—	—	100	43.5	71.3	85.0	27.6	28.5	61.5	72.3	96.4
2004	Urban	Rate (people)		34.4	60.1	76.3	34.4	79.9		—	—	—	—	—	—	—	—		47.1	75.1	87.8	32.3	33.1	65.2	75.6	97.2
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	300	37.7	69.8	84.1	39.6	84.4	300	—	—	—	—	—	—	—	—	300	57.1	83.7	91.9	31.3	36.2	76.1	84.0	98.4
2004	Rural	Rate (people)		43.2	75.4	87.2	44.9	87.5		—	—	—	—	—	—	—	—		64.9	88.0	94.1	37.1	42.2	81.4	88.2	98.7
2004	Overall	Line		1,791	2,687	3,582	1,873	3,746		—	—	—	—	—	—	—	—		2,449	3,673	4,897	1,724	1,861	2,977	3,722	7,443
2004	Overall	Rate (households)	400	36.4	67.1	82.1	37.9	83.1	400	—	—	—	—	—	—	—	—	400	54.5	81.3	90.6	30.6	34.7	73.4	81.8	98.0
2004	Overall	Rate (people)		41.5	72.5	85.1	42.9	86.0		—	—	—	—	—	—	—	—		61.5	85.6	92.9	36.2	40.4	78.3	85.8	98.4
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	20	5.3	10.7	42.0	0.0	16.0	20	11.1	36.6	61.4	5.6	5.6	11.1	27.0	71.2	20	10.7	36.6	42.0	5.3	0.0	10.7	16.0	52.6
2009	Urban	Rate (people)		10.7	17.4	50.5	0.0	22.8		18.1	41.1	71.1	11.3	11.3	18.1	31.3	80.8		17.4	41.1	50.5	10.7	0.0	17.4	22.8	58.5
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	340	13.4	48.3	71.7	4.8	58.2	340	20.5	57.4	75.7	8.1	4.0	29.9	51.8	87.2	340	25.2	63.1	80.4	9.7	4.8	30.2	54.0	92.0
2009	Rural	Rate (people)		16.5	56.9	79.1	6.1	67.0		24.0	65.2	81.6	9.7	4.9	36.5	58.8	91.1		31.1	71.5	85.5	11.9	5.9	37.2	62.4	94.6
2009	Overall	Line		3,226	4,839	6,453	2,651	5,302		3,549	5,323	7,097	2,876	2,512	4,019	5,023	10,047		3,933	5,900	7,867	3,137	2,636	4,217	5,272	10,543
2009	Overall	Rate (households)	360	12.9	45.9	69.8	4.5	55.5	360	19.8	55.8	74.6	7.9	4.1	28.5	49.9	85.9	360	24.3	61.4	77.9	9.4	4.5	28.9	51.6	89.5
2009	Overall	Rate (people)		16.1	54.8	77.6	5.8	64.6		23.6	63.6	80.9	9.8	5.3	35.3	57.0	90.4		30.4	69.9	83.6	11.8	5.6	36.1	60.3	92.7
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	10	—	—	—	—	—	10	0.0	10.1	20.4	0.0	0.0	0.0	0.0	59.4	10	0.0	0.0	10.0	0.0	0.0	0.0	0.0	30.0
2011	Urban	Rate (people)		—	—	—	—	—		0.0	14.3	23.1	0.0	0.0	0.0	0.0	54.0		0.0	0.0	14.3	0.0	0.0	0.0	0.0	31.4
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	80	—	—	—	—	—	80	16.2	51.9	71.8	8.8	3.8	23.1	45.6	91.4	80	21.5	60.5	80.7	8.5	3.7	25.4	48.7	92.4
2011	Rural	Rate (people)		—	—	—	—	—		19.4	58.6	76.9	9.2	4.3	25.9	50.5	95.4		22.5	66.9	84.7	10.6	4.0	27.5	55.6	95.1
2011	Overall	Line		—	—	—	—	—		4,006	6,008	8,011	3,358	2,731	4,370	5,463	10,926		4,445	6,667	8,890	3,647	2,876	4,601	5,752	11,503
2011	Overall	Rate (households)	90	—	—	—	—	—	90	15.1	49.0	68.3	8.2	3.6	21.5	42.5	89.2	90	20.0	56.3	75.8	7.9	3.5	23.6	45.3	88.0
2011	Overall	Rate (people)		—	—	—	—	—		18.3	56.2	74.0	8.7	4.1	24.4	47.7	93.1		21.3	63.2	80.8	10.0	3.8	26.0	52.5	91.5
2012	Urban	Line		—	—	—	—	—		7,391	11,086	14,781	6,368	5,023	8,038	10,047	20,094		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	780	—	—	—	—	—	780	11.3	42.2	73.0	5.3	1.6	17.1	33.0	88.2	780	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		16.3	50.4	78.0	8.1	3.0	23.2	40.4	91.1		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		7,391	11,086	14,781	6,368	5,023	8,038	10,047	20,094		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	781	—	—	—	—	—	781	11.3	42.2	73.0	5.3	1.6	17.1	33.0	88.2	781	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		16.3	50.4	78.0	8.1	3.0	23.2	40.4	91.1		—	—	—	—	—	—	—	—

Figure 13 (Rotanak Kiri): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-def n	Natl 100%	150%	200%	Intl $1.25	$2.50	Gov n	Natl 100%	150%	200%	Median	Intl $1.25	$2.00	$2.50	$5.00	WB n	Natl 100%	150%	200%	Median	Intl $1.25	$2.00	$2.50	$5.00
2004	Urban	Line	10	1,952	2,928	3,904	2,042	4,084	10	—	—	—	—	—	—	—	—	10	2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)		10.0	30.0	50.0	10.0	50.0		—	—	—	—	—	—	—	—		30.0	40.0	50.0	10.0	10.0	30.0	40.0	90.0
2004	Urban	Rate (people)		9.6	36.5	51.9	9.6	51.9		—	—	—	—	—	—	—	—		36.5	44.2	51.9	9.6	9.6	36.5	44.2	90.4
2004	Rural	Line	60	1,753	2,630	3,506	1,833	3,666	60	—	—	—	—	—	—	—	—	60	2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)		40.4	65.0	77.2	45.5	77.2		—	—	—	—	—	—	—	—		59.2	87.2	93.5	28.1	42.6	75.0	89.3	98.5
2004	Rural	Rate (people)		49.8	73.9	80.3	55.1	80.3		—	—	—	—	—	—	—	—		69.6	88.7	94.6	37.2	52.3	81.5	90.3	99.2
2004	Overall	Line	70	1,777	2,665	3,553	1,858	3,716	70	—	—	—	—	—	—	—	—	70	2,433	3,650	4,866	1,710	1,849	2,958	3,698	7,396
2004	Overall	Rate (households)		36.8	60.8	73.9	41.3	73.9		—	—	—	—	—	—	—	—		55.7	81.5	88.3	25.9	38.7	69.6	83.4	97.5
2004	Overall	Rate (people)		45.0	69.4	76.9	49.7	76.9		—	—	—	—	—	—	—	—		65.7	83.4	89.5	33.9	47.2	76.1	84.8	98.1
2009	Urban	Line	20	3,458	5,187	6,916	2,842	5,683	20	4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321	20	4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)		0.0	5.2	10.3	0.0	5.2		0.0	10.0	41.3	0.0	0.0	0.0	5.0	46.0		5.2	10.3	30.3	0.0	0.0	5.2	5.2	40.7
2009	Urban	Rate (people)		0.0	4.9	9.7	0.0	4.9		0.0	9.5	45.2	0.0	0.0	0.0	4.7	50.7		4.9	9.7	29.7	0.0	0.0	4.9	4.9	45.5
2009	Rural	Line	100	3,213	4,820	6,426	2,640	5,281	100	3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889	100	3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)		40.4	61.8	81.4	26.6	67.9		43.9	71.5	83.5	34.8	20.8	54.0	65.2	93.1		51.4	71.0	87.1	38.4	23.5	54.5	63.9	95.2
2009	Rural	Rate (people)		51.1	71.8	88.8	35.3	76.3		54.7	79.3	90.2	45.0	29.1	65.7	74.5	95.8		63.6	78.9	92.6	49.3	32.7	66.8	73.9	97.9
2009	Overall	Line	120	3,241	4,861	6,481	2,663	5,326	120	3,603	5,404	7,206	2,924	2,550	4,080	5,100	10,200	120	3,954	5,931	7,908	3,159	2,650	4,240	5,300	10,599
2009	Overall	Rate (households)		34.9	54.1	71.7	23.0	59.4		37.1	61.9	76.9	29.4	17.6	45.7	55.9	85.8		45.1	62.8	79.4	33.1	20.3	47.8	55.9	87.8
2009	Overall	Rate (people)		45.3	64.3	80.0	31.3	68.2		47.7	70.4	84.4	39.3	25.4	57.3	65.6	90.0		57.0	71.1	85.5	43.7	29.0	59.8	66.2	92.0
2011	Urban	Line	10	—	—	—	—	—	10	4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395	10	4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)		—	—	—	—	—		0.0	0.0	20.4	0.0	0.0	0.0	0.0	81.7		0.0	0.0	10.0	0.0	0.0	0.0	0.0	70.0
2011	Urban	Rate (people)		—	—	—	—	—		0.0	0.0	26.8	0.0	0.0	0.0	0.0	94.0		0.0	0.0	13.3	0.0	0.0	0.0	0.0	80.0
2011	Rural	Line	20	—	—	—	—	—	20	3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782	20	4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)		—	—	—	—	—		84.4	100.0	100.0	78.8	58.9	89.2	100.0	100.0		83.8	100.0	100.0	78.4	58.4	83.8	100.0	100.0
2011	Rural	Rate (people)		—	—	—	—	—		93.3	100.0	100.0	90.2	73.3	95.1	100.0	100.0		93.1	100.0	100.0	90.1	72.9	93.1	100.0	100.0
2011	Overall	Line	30	—	—	—	—	—	30	4,069	6,104	8,139	3,399	2,775	4,440	5,550	11,100	30	4,471	6,706	8,942	3,662	2,893	4,628	5,785	11,571
2011	Overall	Rate (households)		—	—	—	—	—		72.4	85.8	88.7	67.6	50.5	76.5	85.8	97.4		71.9	85.8	87.2	67.3	50.1	71.9	85.8	95.7
2011	Overall	Rate (people)		—	—	—	—	—		82.0	87.9	91.1	79.3	64.4	83.5	87.9	99.3		81.9	88.0	89.6	79.3	64.1	81.9	88.0	97.6
2012	Urban	Line	50	—	—	—	—	—	50	5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742	50	—	—	—	—	—	—	—	—
2012	Urban	Rate (households)		—	—	—	—	—		3.5	34.0	65.0	0.0	0.0	3.5	13.4	85.3		—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		3.5	40.1	74.5	0.0	0.0	3.5	13.4	91.8		—	—	—	—	—	—	—	—
2012	Rural	Line	20	—	—	—	—	—	20	4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064	20	—	—	—	—	—	—	—	—
2012	Rural	Rate (households)		—	—	—	—	—		0.0	53.1	78.8	0.0	0.0	10.4	42.8	100.0		—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		0.0	56.8	82.3	0.0	0.0	12.7	49.8	100.0		—	—	—	—	—	—	—	—
2012	Overall	Line	70	—	—	—	—	—	70	4,494	6,741	8,988	3,806	3,055	4,887	6,109	12,218	70	—	—	—	—	—	—	—	—
2012	Overall	Rate (households)		—	—	—	—	—		1.6	44.5	72.5	0.0	0.0	7.3	29.5	93.3		—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		1.5	49.6	79.0	0.0	0.0	8.7	34.1	96.5		—	—	—	—	—	—	—	—

Figure 13 (Siem Reab): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty									
			n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00	n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	150	11.4	26.2	40.9	14.8	42.3	150	—	—	—	—	—	—	—	—	150	19.6	42.7	59.6	9.2	10.5	30.5	42.7	76.4
2004	Urban	Rate (people)		11.6	27.6	41.9	15.4	43.7		—	—	—	—	—	—	—	—		21.6	44.2	63.0	9.2	10.4	33.2	44.2	79.3
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	560	55.3	80.6	91.9	58.1	92.7	560	—	—	—	—	—	—	—	—	560	69.0	91.3	97.4	42.7	49.5	82.3	92.3	99.1
2004	Rural	Rate (people)		59.9	83.4	93.2	62.8	93.8		—	—	—	—	—	—	—	—		73.2	93.3	98.0	48.9	55.2	85.3	94.0	99.4
2004	Overall	Line		1,786	2,679	3,572	1,868	3,736		—	—	—	—	—	—	—	—		2,443	3,665	4,887	1,719	1,857	2,971	3,714	7,427
2004	Overall	Rate (households)	710	48.5	72.1	83.9	51.3	84.8	710	—	—	—	—	—	—	—	—	710	61.3	83.7	91.5	37.5	43.4	74.2	84.5	95.6
2004	Overall	Rate (people)		51.8	74.1	84.7	54.9	85.5		—	—	—	—	—	—	—	—		64.6	85.1	92.1	42.3	47.7	76.6	85.7	96.1
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	120	6.4	14.1	27.9	3.7	19.2	120	13.0	25.0	39.7	6.1	4.6	13.7	23.2	69.5	120	11.7	22.5	35.9	5.4	1.9	12.4	18.1	55.8
2009	Urban	Rate (people)		9.1	19.6	34.1	6.0	25.1		18.4	31.9	46.6	9.1	7.1	19.3	30.1	72.9		16.6	28.1	41.8	8.0	3.3	17.7	24.4	59.5
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	560	22.9	50.7	68.8	11.5	57.2	560	30.4	57.8	74.2	18.0	11.4	39.3	55.3	87.2	560	32.6	61.4	75.7	19.9	11.0	38.0	53.9	86.8
2009	Rural	Rate (people)		26.1	55.3	72.9	13.4	61.9		33.9	62.3	78.6	21.1	13.1	43.0	59.6	90.2		36.6	65.7	79.3	22.8	13.2	42.2	58.2	89.9
2009	Overall	Line		3,256	4,883	6,511	2,675	5,350		3,660	5,490	7,320	2,973	2,590	4,145	5,181	10,361		3,976	5,964	7,952	3,182	2,664	4,263	5,329	10,658
2009	Overall	Rate (households)	680	19.8	43.8	61.1	10.0	50.0	680	26.7	50.9	66.9	15.4	9.9	33.9	48.5	83.4	680	28.6	54.0	68.1	17.1	9.3	33.2	47.1	81.0
2009	Overall	Rate (people)		23.1	49.1	66.2	12.1	55.5		30.9	56.4	72.4	18.7	11.9	38.4	53.9	86.8		33.1	59.2	72.8	20.2	11.5	38.0	52.3	84.6
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	50	—	—	—	—	—	50	15.8	38.7	54.4	10.3	8.3	15.8	32.5	73.8	50	10.2	36.4	46.5	10.2	6.1	12.1	22.3	54.7
2011	Urban	Rate (people)		—	—	—	—	—		21.1	46.6	61.5	14.5	12.2	21.1	41.5	77.1		14.4	44.6	55.3	14.4	10.0	17.4	28.2	62.5
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	129	—	—	—	—	—	129	17.2	60.1	78.2	8.7	4.0	25.1	49.0	88.9	129	22.0	61.7	77.9	11.0	4.0	27.4	47.8	86.5
2011	Rural	Rate (people)		—	—	—	—	—		20.5	64.9	81.6	10.3	4.5	30.1	55.1	90.9		25.8	69.3	83.1	13.5	4.5	32.8	54.4	89.3
2011	Overall	Line		—	—	—	—	—		4,154	6,230	8,307	3,452	2,832	4,532	5,665	11,329		4,507	6,761	9,015	3,683	2,916	4,666	5,833	11,665
2011	Overall	Rate (households)	179	—	—	—	—	—	179	17.0	55.9	73.6	9.0	4.8	23.3	45.8	86.0	179	19.7	56.8	71.7	10.9	4.4	24.4	42.8	80.3
2011	Overall	Rate (people)		—	—	—	—	—		20.6	61.1	77.4	11.2	6.1	28.2	52.2	88.0		23.4	64.2	77.3	13.7	5.6	29.6	48.9	83.6
2012	Urban	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	30	—	—	—	—	—	30	24.1	51.4	79.5	17.2	3.4	24.1	47.9	92.7	30	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		30.1	55.0	82.8	22.7	4.6	30.1	50.9	93.5		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	31	—	—	—	—	—	31	24.1	51.4	79.5	17.2	3.4	24.1	47.9	92.7	31	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		30.1	55.0	82.8	22.7	4.6	30.1	50.9	93.5		—	—	—	—	—	—	—	—

Figure 13 (Krong Preah Sihanouk): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old n	Old Natl 100%	Old Natl 150%	Old Natl 200%	Old $1.25	Old $2.50	Gov n	Gov Natl 100%	Gov Natl 150%	Gov Natl 200%	Gov Median	Gov $1.25	Gov $2.00	Gov $2.50	Gov $5.00	WB n	WB Natl 100%	WB Natl 150%	WB Natl 200%	WB Median	WB $1.25	WB $2.00	WB $2.50	WB $5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	220	13.3	35.5	47.6	16.8	49.8	220	—	—	—	—	—	—	—	—	220	29.3	48.9	66.5	9.5	13.8	39.1	49.7	82.2
2004	Urban	Rate (people)		14.9	38.1	50.5	18.5	52.3		—	—	—	—	—	—	—	—		32.7	52.0	69.3	11.5	16.1	42.7	52.9	84.4
2004	Rural	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2004	Rural	Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2004	Rural	Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2004	Overall	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Overall	Rate (households)	221	13.3	35.5	47.6	16.8	49.8	221	—	—	—	—	—	—	—	—	221	29.3	48.9	66.5	9.5	13.8	39.1	49.7	82.2
2004	Overall	Rate (people)		14.9	38.1	50.5	18.5	52.3		—	—	—	—	—	—	—	—		32.7	52.0	69.3	11.5	16.1	42.7	52.9	84.4
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	59	2.1	8.4	16.7	2.1	8.4	59	3.6	10.6	28.1	2.1	2.1	7.0	10.6	46.3	59	2.1	9.8	20.9	2.1	2.1	3.5	8.4	36.6
2009	Urban	Rate (people)		2.0	11.9	21.5	2.0	11.9		5.6	12.8	35.0	2.0	2.0	10.0	12.8	54.8		2.0	13.5	26.1	2.0	2.0	5.6	11.9	45.1
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	100	0.9	24.7	48.9	0.0	29.9	100	4.9	36.8	54.7	0.0	0.0	14.2	31.2	74.2	100	9.9	41.2	61.1	0.0	0.0	13.0	29.2	78.2
2009	Rural	Rate (people)		1.3	29.4	56.4	0.0	35.0		5.3	42.3	61.6	0.0	0.0	16.9	36.0	80.0		12.2	47.7	68.0	0.0	0.0	16.4	34.6	82.4
2009	Overall	Line		3,318	4,977	6,636	2,727	5,453		3,840	5,760	7,680	3,129	2,718	4,349	5,436	10,871		4,068	6,102	8,136	3,279	2,726	4,362	5,452	10,904
2009	Overall	Rate (households)	159	1.4	18.0	35.7	0.9	21.1	159	4.4	26.7	44.4	0.8	0.8	11.4	23.3	63.4	159	6.7	28.3	44.6	0.9	0.9	9.1	20.7	61.1
2009	Overall	Rate (people)		1.6	21.9	41.4	0.9	25.1		5.4	30.3	50.9	0.8	0.8	14.1	26.6	69.8		7.8	33.0	50.0	0.9	0.9	11.7	24.9	66.4
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	30	—	—	—	—	—	30	0.0	6.0	26.0	0.0	0.0	0.0	0.0	67.4	30	0.0	3.1	12.8	0.0	0.0	0.0	0.0	39.7
2011	Urban	Rate (people)		—	—	—	—	—		0.0	7.9	37.5	0.0	0.0	0.0	0.0	75.1		0.0	4.1	21.3	0.0	0.0	0.0	0.0	51.3
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	30	—	—	—	—	—	30	7.5	29.2	65.6	5.0	0.0	7.5	13.6	89.9	30	15.4	35.9	71.0	9.0	0.0	15.4	29.4	94.0
2011	Rural	Rate (people)		—	—	—	—	—		8.4	31.4	70.3	6.1	0.0	8.4	14.0	90.8		17.5	41.1	75.7	10.7	0.0	17.5	33.8	94.5
2011	Overall	Line		—	—	—	—	—		4,395	6,592	8,789	3,604	2,997	4,795	5,993	11,987		4,609	6,914	9,219	3,742	2,982	4,772	5,965	11,929
2011	Overall	Rate (households)	60	—	—	—	—	—	60	4.4	19.5	49.0	2.9	0.0	4.4	7.9	80.5	60	9.0	22.2	46.7	5.2	0.0	9.0	17.1	71.3
2011	Overall	Rate (people)		—	—	—	—	—		4.5	20.6	55.2	3.3	0.0	4.5	7.5	83.6		9.4	24.0	50.6	5.8	0.0	9.4	18.2	74.6
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	20	—	—	—	—	—	20	0.0	5.2	40.0	0.0	0.0	0.0	0.0	59.6	20	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		0.0	2.6	46.5	0.0	0.0	0.0	0.0	65.9		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	220	—	—	—	—	—	220	15.8	56.8	81.5	5.7	1.9	21.6	46.8	94.7	220	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		19.3	62.2	84.9	7.3	2.3	24.9	52.6	95.7		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,149	6,223	8,297	3,512	2,820	4,512	5,640	11,280		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	240	—	—	—	—	—	240	14.4	52.3	77.9	5.2	1.8	19.7	42.7	91.6	240	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		17.8	57.4	81.8	6.7	2.1	22.9	48.4	93.3		—	—	—	—	—	—	—	—

Figure 13 (Stueng Traeng): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-def. n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	Gov. n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00	WB n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	40	45.8	79.2	88.3	45.8	93.1	40	—	—	—	—	—	—	—	—	40	64.9	84.0	95.2	31.0	35.3	79.2	84.0	100.0
2004	Urban	Rate (people)		50.7	83.4	89.4	50.7	91.5		—	—	—	—	—	—	—	—		70.1	86.0	94.3	38.1	43.2	83.4	86.0	100.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	20	85.0	95.0	100.0	90.0	100.0	20	—	—	—	—	—	—	—	—	20	90.0	100.0	100.0	65.0	75.0	100.0	100.0	100.0
2004	Rural	Rate (people)		92.2	97.4	100.0	94.8	100.0		—	—	—	—	—	—	—	—		94.8	100.0	100.0	78.3	85.2	100.0	100.0	100.0
2004	Overall	Line		1,849	2,773	3,697	1,934	3,867		—	—	—	—	—	—	—	—		2,511	3,767	5,022	1,782	1,908	3,053	3,817	7,633
2004	Overall	Rate (households)	60	64.3	86.7	93.8	66.7	96.3	60	—	—	—	—	—	—	—	—	60	76.8	91.6	97.5	47.1	54.1	89.0	91.6	100.0
2004	Overall	Rate (people)		72.2	90.7	94.9	73.6	95.9		—	—	—	—	—	—	—	—		82.9	93.2	97.2	59.0	65.0	92.0	93.2	100.0
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	20	0.0	10.4	30.4	0.0	20.4	20	0.0	35.9	59.9	0.0	0.0	5.1	35.9	90.3	20	0.0	20.4	45.2	0.0	0.0	0.0	10.4	65.2
2009	Urban	Rate (people)		0.0	12.1	32.9	0.0	23.9		0.0	46.1	67.8	0.0	5.4	46.1	92.2			0.0	23.9	55.2	0.0	0.0	0.0	12.1	74.2
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	99	10.2	42.2	64.1	4.1	49.1	99	16.5	54.4	67.3	8.3	5.2	26.9	47.3	88.6	99	20.8	59.4	78.0	9.4	3.1	28.4	49.7	91.2
2009	Rural	Rate (people)		13.6	48.9	71.6	5.2	55.8		21.9	62.0	75.6	10.7	7.0	34.8	54.5	91.9		27.4	68.7	85.0	11.9	4.1	34.0	58.9	93.9
2009	Overall	Line		3,256	4,884	6,512	2,675	5,351		3,622	5,433	7,244	2,940	2,564	4,102	5,127	10,255		3,976	5,965	7,953	3,183	2,665	4,263	5,329	10,659
2009	Overall	Rate (households)	119	8.7	37.3	59.0	3.5	44.7	119	14.3	52.0	66.3	7.2	4.5	24.1	45.8	88.8	119	17.6	53.4	73.0	8.0	2.6	24.1	43.7	87.2
2009	Overall	Rate (people)		11.2	42.5	64.9	4.3	50.2		18.6	59.6	74.4	9.1	6.0	30.4	53.3	92.0		22.6	60.8	79.8	9.8	3.4	28.0	50.8	90.4
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	9	—	—	—	—	—	9	23.3	66.6	89.1	0.0	0.0	23.3	56.4	89.1	9	0.0	44.4	66.7	0.0	0.0	0.0	33.3	77.8
2011	Urban	Rate (people)		—	—	—	—	—		27.3	68.3	97.4	0.0	0.0	27.3	63.5	97.4		0.0	52.6	81.6	0.0	0.0	0.0	39.5	86.8
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	20	—	—	—	—	—	20	33.0	62.4	89.9	11.3	5.6	33.0	52.3	94.6	20	21.5	70.7	100.0	10.7	0.0	26.8	56.8	100.0
2011	Rural	Rate (people)		—	—	—	—	—		38.1	70.9	91.6	18.3	9.1	38.1	58.6	94.5		30.8	77.6	100.0	17.6	0.0	36.3	63.4	100.0
2011	Overall	Line		—	—	—	—	—		4,089	6,134	8,178	3,411	2,788	4,461	5,577	11,154		4,480	6,720	8,959	3,667	2,898	4,637	5,797	11,593
2011	Overall	Rate (households)	29	—	—	—	—	—	29	31.5	63.1	89.7	9.5	4.7	31.5	52.9	93.7	29	18.0	66.5	94.7	9.0	0.0	22.5	53.1	96.4
2011	Overall	Rate (people)		—	—	—	—	—		36.6	70.5	92.5	15.7	7.8	36.6	59.3	94.9		26.4	74.1	97.4	15.1	0.0	31.1	60.0	98.1
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	20	—	—	—	—	—	20	10.1	25.1	34.5	0.0	0.0	10.1	25.1	69.6	20	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		14.8	30.5	36.7	0.0	0.0	14.8	30.5	72.3		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	90	—	—	—	—	—	90	18.1	54.3	77.5	7.8	1.2	24.2	48.5	94.0	90	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		20.6	59.6	80.5	10.5	1.8	28.7	53.2	93.9		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,181	6,271	8,361	3,539	2,842	4,546	5,683	11,366		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	110	—	—	—	—	—	110	17.2	50.9	72.5	6.9	1.1	22.5	45.8	91.2	110	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		19.9	56.3	75.5	9.3	1.6	27.2	50.6	91.5		—	—	—	—	—	—	—	—

Figure 13 (Svaay Rieng): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

| | | | Old-definition poverty | | | | | | Government-definition poverty | | | | | | | | | World-Bank-definition poverty | | | | | | | | |
| | | | | Natl. pov. line | | | Intl. 2005 PPP | | | Natl. poverty line | | | | Intl. 2005 PPP | | | | | Natl. poverty line | | | | Intl. 2005 PPP | | | |
Year	Urban or Rural	Line or rate for people or households	n	100%	150%	200%	$1.25	$2.50	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00	n	100%	150%	200%	Median	$1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	40	9.9	32.3	67.5	9.9	69.9	40	—	—	—	—	—	—	—	—	40	22.3	60.0	72.3	9.9	9.9	37.1	60.0	89.9
2004	Urban	Rate (people)		12.9	35.5	71.2	12.9	73.7		—	—	—	—	—	—	—	—		24.5	61.8	76.8	12.9	12.9	38.4	61.8	92.6
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	480	32.4	63.2	80.7	36.2	83.8	480	—	—	—	—	—	—	—	—	480	51.2	80.8	91.7	19.5	26.5	65.6	82.5	98.7
2004	Rural	Rate (people)		37.1	66.9	83.3	41.2	86.4		—	—	—	—	—	—	—	—		57.7	85.2	94.8	23.8	31.3	71.3	86.8	99.4
2004	Overall	Line		1,763	2,644	3,525	1,843	3,686		—	—	—	—	—	—	—	—		2,418	3,627	4,836	1,696	1,837	2,940	3,675	7,350
2004	Overall	Rate (households)	520	31.3	61.7	80.0	35.0	83.2	520	—	—	—	—	—	—	—	—	520	49.8	79.8	90.8	19.0	25.7	64.3	81.4	98.3
2004	Overall	Rate (people)		35.9	65.4	82.7	39.8	85.8		—	—	—	—	—	—	—	—		56.1	84.1	93.9	23.3	30.4	69.7	85.5	99.1
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	20	10.0	26.6	56.6	5.5	26.6	20	21.3	62.4	82.2	9.9	9.9	37.8	52.4	95.6	20	10.0	52.2	67.7	10.0	5.5	21.1	32.2	82.2
2009	Urban	Rate (people)		16.5	33.4	66.0	9.7	33.4		27.5	66.0	78.6	16.2	16.2	43.0	57.7	97.1		16.5	57.7	65.4	16.5	9.7	38.3	—	78.6
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	500	9.7	32.2	53.9	2.8	40.8	500	15.0	42.0	66.0	7.3	3.2	21.9	36.6	82.6	500	17.9	45.8	70.3	8.5	2.3	21.3	37.7	85.8
2009	Rural	Rate (people)		13.3	38.6	61.6	4.1	48.0		19.0	48.1	72.9	9.7	4.6	27.1	42.6	86.6		22.6	52.4	76.6	11.9	3.5	26.9	44.5	89.8
2009	Overall	Line		3,221	4,832	6,442	2,647	5,294		3,523	5,285	7,047	2,855	2,494	3,990	4,988	9,975		3,926	5,889	7,852	3,129	2,631	4,209	5,261	10,523
2009	Overall	Rate (households)	520	9.7	32.0	54.0	2.8	40.4	520	15.2	42.6	66.6	7.4	3.5	22.5	37.1	83.0	520	17.7	46.0	70.2	8.6	2.4	21.3	37.5	85.7
2009	Overall	Rate (people)		13.4	38.4	61.6	4.2	47.5		19.3	48.7	73.1	10.0	5.0	27.7	43.1	87.0		22.4	52.5	76.2	12.1	3.7	26.9	44.3	89.4
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	10	—	—	—	—	—	10	60.8	100.0	100.0	20.0	20.0	60.8	90.8	100.0	10	30.0	80.0	100.0	10.0	0.0	40.0	70.0	100.0
2011	Urban	Rate (people)		—	—	—	—	—		73.1	100.0	100.0	17.4	17.4	73.1	97.8	100.0		47.5	92.5	100.0	12.5	0.0	52.5	82.5	100.0
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	110	—	—	—	—	—	110	11.4	51.3	83.2	4.5	2.8	17.4	42.1	94.4	110	13.4	49.5	77.6	3.7	1.0	14.9	34.8	93.3
2011	Rural	Rate (people)		—	—	—	—	—		17.2	60.5	88.8	7.1	4.7	23.3	51.5	96.4		19.2	59.6	84.6	5.8	2.3	22.3	45.3	95.8
2011	Overall	Line		—	—	—	—	—		3,985	5,978	7,971	3,346	2,718	4,348	5,435	10,870		4,436	6,654	8,871	3,641	2,870	4,592	5,740	11,480
2011	Overall	Rate (households)	120	—	—	—	—	—	120	13.2	53.0	83.8	5.0	3.4	18.9	43.9	94.6	120	14.0	50.6	78.4	3.9	0.9	15.8	36.1	93.5
2011	Overall	Rate (people)		—	—	—	—	—		19.1	61.8	89.2	7.5	5.1	24.9	53.1	96.5		20.2	60.7	85.1	6.0	2.2	23.3	46.5	95.9
2012	Urban	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	30	—	—	—	—	—	30	31.7	80.0	88.2	16.1	3.4	39.2	69.9	89.9	30	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		35.5	86.1	91.6	17.7	3.3	42.9	76.8	93.3		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	31	—	—	—	—	—	31	31.7	80.0	88.2	16.1	3.4	39.2	69.9	89.9	31	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		35.5	86.1	91.6	17.7	3.3	42.9	76.8	93.3		—	—	—	—	—	—	—	—

Figure 13 (Taakaev): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-def n	Old 100%	Old 150%	Old 200%	Old $1.25	Old $2.50	Gov n	Gov 100%	Gov 150%	Gov 200%	Gov Median	Gov $1.25	Gov $2.00	Gov $2.50	Gov $5.00	WB n	WB 100%	WB 150%	WB 200%	WB Median	WB $1.25	WB $2.00	WB $2.50	WB $5.00
2004	Urban	Line	70	1,952	2,928	3,904	2,042	4,084	70	—	—	—	—	—	—	—	—	70	2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)		11.1	32.2	58.2	12.8	60.9		—	—	—	—	—	—	—	—		20.3	52.6	74.3	9.4	9.4	36.5	55.8	94.0
2004	Urban	Rate (people)		13.4	35.6	61.2	15.8	64.5		—	—	—	—	—	—	—	—		23.4	55.5	76.4	11.7	11.7	38.4	58.9	93.2
2004	Rural	Line	760	1,753	2,630	3,506	1,833	3,666	760	—	—	—	—	—	—	—	—	760	2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)		24.4	56.7	74.3	27.6	76.7		—	—	—	—	—	—	—	—		44.5	74.4	87.9	18.8	24.2	59.9	75.3	95.8
2004	Rural	Rate (people)		28.3	62.6	78.1	32.0	80.2		—	—	—	—	—	—	—	—		51.3	78.7	90.3	21.9	28.3	66.9	79.4	96.7
2004	Overall	Line	830	1,761	2,642	3,522	1,842	3,683	830	—	—	—	—	—	—	—	—	830	2,416	3,624	4,832	1,694	1,836	2,938	3,672	7,345
2004	Overall	Rate (households)		23.9	55.7	73.6	27.0	76.0		—	—	—	—	—	—	—	—		43.5	73.5	87.3	18.4	23.6	59.0	74.5	95.8
2004	Overall	Rate (people)		27.7	61.5	77.4	31.3	79.5		—	—	—	—	—	—	—	—		50.1	77.8	89.8	21.5	27.6	65.7	78.5	96.6
2009	Urban	Line	20	3,458	5,187	6,916	2,842	5,683	20	4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321	20	4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)		0.0	10.7	21.4	0.0	16.0		10.8	21.5	36.8	5.5	0.0	16.1	21.5	75.5		0.0	21.4	32.1	0.0	0.0	0.0	16.0	46.7
2009	Urban	Rate (people)		0.0	15.1	31.3	0.0	25.5		15.2	31.3	48.7	8.3	0.0	25.6	31.3	86.4		0.0	31.3	40.6	0.0	0.0	0.0	25.5	54.3
2009	Rural	Line	738	3,213	4,820	6,426	2,640	5,281	738	3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889	738	3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)		6.2	28.3	54.2	3.1	36.6		10.7	38.8	62.8	5.0	3.1	17.6	32.3	83.5		12.3	42.4	66.5	5.5	2.7	15.6	32.5	84.9
2009	Rural	Rate (people)		7.4	31.9	58.2	3.7	40.6		12.0	42.2	65.9	5.9	3.5	19.2	35.3	86.2		14.0	46.4	70.3	6.6	3.1	18.0	36.3	87.4
2009	Overall	Line	758	3,216	4,825	6,433	2,643	5,286	758	3,508	5,262	7,015	2,841	2,483	3,972	4,965	9,931	758	3,919	5,878	7,838	3,122	2,626	4,202	5,252	10,504
2009	Overall	Rate (households)		6.1	28.0	53.8	3.1	36.3		10.8	38.5	62.4	5.0	3.0	17.6	32.1	83.4		12.1	42.1	66.0	5.4	2.7	15.4	32.3	84.3
2009	Overall	Rate (people)		7.3	31.7	57.8	3.7	40.4		12.0	42.1	65.6	6.0	3.4	19.3	35.2	86.2		13.8	46.2	69.9	6.5	3.1	17.7	36.2	86.9
2011	Urban	Line	10	—	—	—	—	—	10	4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395	10	4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)		—	—	—	—	—		0.0	20.4	30.4	0.0	0.0	0.0	20.4	60.1		0.0	20.0	30.0	0.0	0.0	0.0	0.0	50.0
2011	Urban	Rate (people)		—	—	—	—	—		0.0	27.7	41.0	0.0	0.0	0.0	27.7	66.3		0.0	27.3	40.9	0.0	0.0	0.0	0.0	63.6
2011	Rural	Line	170	—	—	—	—	—	170	3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782	170	4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)		—	—	—	—	—		12.9	45.8	74.9	5.5	0.0	15.8	37.8	92.2		14.5	54.1	76.7	5.2	0.0	17.4	37.6	90.9
2011	Rural	Rate (people)		—	—	—	—	—		15.0	48.9	75.3	6.8	0.0	18.7	43.0	93.2		16.5	59.2	79.0	6.6	0.0	21.2	43.2	91.4
2011	Overall	Line	180	—	—	—	—	—	180	3,971	5,956	7,942	3,336	2,708	4,332	5,415	10,831	180	4,430	6,645	8,859	3,638	2,866	4,586	5,732	11,464
2011	Overall	Rate (households)		—	—	—	—	—		12.6	45.3	74.0	5.4	0.0	15.4	37.4	91.6		14.2	53.4	75.8	5.1	0.0	17.1	36.8	90.1
2011	Overall	Rate (people)		—	—	—	—	—		14.7	48.5	74.7	6.7	0.0	18.4	42.7	92.7		16.2	58.6	78.3	6.5	0.0	20.8	42.4	90.9
2012	Urban	Line	90	—	—	—	—	—	90	5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742	90	—	—	—	—	—	—	—	—
2012	Urban	Rate (households)		—	—	—	—	—		21.8	33.5	55.7	11.2	3.2	24.4	29.5	69.0		—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		26.0	39.7	61.6	14.4	5.0	30.7	35.4	74.5		—	—	—	—	—	—	—	—
2012	Rural	Line	150	—	—	—	—	—	150	4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064	150	—	—	—	—	—	—	—	—
2012	Rural	Rate (households)		—	—	—	—	—		32.5	63.9	86.6	20.7	6.8	35.7	56.5	91.7		—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		38.3	68.6	89.5	25.4	9.3	41.4	62.1	93.3		—	—	—	—	—	—	—	—
2012	Overall	Line	240	—	—	—	—	—	240	4,279	6,418	8,557	3,623	2,908	4,653	5,816	11,632	240	—	—	—	—	—	—	—	—
2012	Overall	Rate (households)		—	—	—	—	—		30.0	56.6	79.2	18.4	5.9	33.0	50.0	86.2		—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		35.7	62.5	83.6	23.1	8.4	39.1	56.4	89.3		—	—	—	—	—	—	—	—

Figure 13 (Otdar Mean Chey): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty n	Natl. pov. line 100%	150%	200%	Intl. 2005 PPP $1.25	$2.50	Gov n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00	WB n	Natl. poverty line 100%	150%	200%	Median	Intl. 2005 PPP $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		1,952	2,928	3,904	2,042	4,084		—	—	—	—	—	—	—	—		2,623	3,935	5,246	1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	40	29.8	64.0	85.8	33.1	87.1	40	—	—	—	—	—	—	—	—	40	48.1	90.0	100.0	15.8	17.3	60.0	90.0	100.0
2004	Urban	Rate (people)		37.1	70.3	89.0	39.6	89.7		—	—	—	—	—	—	—	—		55.6	92.8	100.0	21.5	22.9	67.3	92.8	100.0
2004	Rural	Line		1,753	2,630	3,506	1,833	3,666		—	—	—	—	—	—	—	—		2,407	3,611	4,815	1,686	1,829	2,927	3,659	7,318
2004	Rural	Rate (households)	60	26.7	71.7	85.2	33.3	85.2	60	—	—	—	—	—	—	—	—	60	51.0	87.4	93.4	23.3	23.3	77.7	87.4	98.8
2004	Rural	Rate (people)		31.7	74.8	84.6	40.5	84.6		—	—	—	—	—	—	—	—		58.3	87.8	94.7	29.6	29.6	81.7	87.8	98.7
2004	Overall	Line		1,808	2,712	3,616	1,891	3,782		—	—	—	—	—	—	—	—		2,467	3,701	4,934	1,741	1,875	3,000	3,750	7,500
2004	Overall	Rate (households)	100	27.5	69.8	85.4	33.2	85.7	100	—	—	—	—	—	—	—	—	100	50.3	88.1	95.1	21.4	21.8	73.2	88.1	99.1
2004	Overall	Rate (people)		33.2	73.6	85.8	40.3	86.0		—	—	—	—	—	—	—	—		57.5	89.2	96.2	27.4	27.8	77.7	89.2	99.1
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	20	0.0	25.6	65.6	0.0	41.3	20	16.8	61.2	80.0	11.2	0.0	21.2	50.0	100.0	20	15.6	50.0	80.0	5.6	0.0	15.6	41.3	100.0
2009	Urban	Rate (people)		0.0	29.3	70.9	0.0	46.9		17.5	67.0	84.7	12.5	0.0	22.4	55.7	100.0		19.4	55.7	84.7	7.5	0.0	14.7	47.9	100.0
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	140	19.0	51.9	73.7	7.4	62.3	140	28.3	66.1	80.0	10.5	6.0	39.1	65.4	90.5	140	30.8	67.0	84.2	13.4	6.9	40.1	60.2	89.4
2009	Rural	Rate (people)		23.2	57.0	77.5	8.9	68.1		32.0	72.3	83.9	12.3	6.9	43.6	71.4	92.6		34.7	71.8	88.1	15.8	8.2	44.8	64.4	91.8
2009	Overall	Line		3,235	4,852	6,470	2,658	5,316		3,578	5,368	7,157	2,902	2,533	4,053	5,066	10,131		3,946	5,919	7,892	3,150	2,644	4,231	5,288	10,577
2009	Overall	Rate (households)	160	17.2	49.4	73.0	6.7	60.4	160	27.1	65.6	80.0	10.6	5.3	37.2	63.8	91.5	160	29.4	65.4	83.8	12.7	6.3	37.8	58.4	90.4
2009	Overall	Rate (people)		21.1	54.6	76.9	8.1	66.2		30.5	71.8	83.9	12.3	6.2	41.5	69.8	93.3		33.3	70.3	87.8	15.1	7.5	42.6	63.0	92.6
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	10	—	—	—	—	—	10	59.6	100.0	100.0	54.6	49.6	89.9	100.0	100.0	10	60.0	90.0	100.0	50.0	30.0	70.0	90.0	100.0
2011	Urban	Rate (people)		—	—	—	—	—		60.8	100.0	100.0	55.2	49.6	92.5	100.0	100.0		61.1	92.6	100.0	50.0	35.2	74.1	92.6	100.0
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	20	—	—	—	—	—	20	0.0	10.9	52.5	0.0	0.0	5.4	10.9	66.9	20	5.4	16.1	56.9	0.0	0.0	5.4	10.7	66.9
2011	Rural	Rate (people)		—	—	—	—	—		0.0	12.2	54.0	0.0	0.0	6.0	12.2	72.0		6.0	19.2	59.0	0.0	0.0	6.0	12.0	72.1
2011	Overall	Line		—	—	—	—	—		4,067	6,101	8,134	3,397	2,773	4,437	5,547	11,094		4,470	6,704	8,939	3,661	2,892	4,627	5,784	11,567
2011	Overall	Rate (households)	30	—	—	—	—	—	30	6.0	19.9	57.3	5.5	5.0	13.9	19.9	70.2	30	10.8	23.4	61.1	4.9	3.0	11.8	18.6	70.1
2011	Overall	Rate (people)		—	—	—	—	—		7.3	22.6	59.5	6.6	5.9	16.3	22.6	75.3		12.5	27.8	63.8	5.9	4.1	14.0	21.5	75.3
2012	Urban	Line		—	—	—	—	—		5,054	7,582	10,109	4,282	3,436	5,497	6,871	13,742		—	—	—	—	—	—	—	—
2012	Urban	Rate (households)	20	—	—	—	—	—	20	10.1	35.4	60.0	4.6	0.0	10.1	25.5	85.4	20	—	—	—	—	—	—	—	—
2012	Urban	Rate (people)		—	—	—	—	—		19.4	38.5	69.4	12.2	0.0	19.4	31.8	86.6		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
2012	Rural	Rate (households)	30	—	—	—	—	—	30	10.4	27.7	53.7	6.7	2.9	13.5	24.0	79.5	30	—	—	—	—	—	—	—	—
2012	Rural	Rate (people)		—	—	—	—	—		9.3	31.4	61.5	4.9	1.3	13.6	27.1	86.6		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,307	6,461	8,614	3,647	2,928	4,684	5,855	11,710		—	—	—	—	—	—	—	—
2012	Overall	Rate (households)	50	—	—	—	—	—	50	10.4	29.2	55.0	6.2	2.3	12.8	24.3	80.7	50	—	—	—	—	—	—	—	—
2012	Overall	Rate (people)		—	—	—	—	—		11.8	33.1	63.4	6.7	1.0	15.0	28.3	86.6		—	—	—	—	—	—	—	—

Figure 13 (Krong Kaeb): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	Old-definition poverty						Government-definition poverty									World-Bank-definition poverty								
			n	\$1.25	\$2.50	100%	150%	200%	n	100%	150%	200%	Median	\$1.25	\$2.00	\$2.50	\$5.00	n	100%	150%	200%	Median	\$1.25	\$2.00	\$2.50	\$5.00
				Natl. pov. line 100% 150% 200%	Intl. 2005 PPP					Natl. poverty line				Intl. 2005 PPP					Natl. poverty line				Intl. 2005 PPP			
2004	Urban	Line		1,952 2,928 3,904	2,042 4,084					—	—	—	—	—	—	—	—		2,623 3,935 5,246			1,886	1,993	3,190	3,987	7,974
2004	Urban	Rate (households)	50	26.1 62.2 90.2	30.2 90.2				50	—	—	—	—	—	—	—	—	50	52.3 90.2 98.1			20.2	26.2	74.3	92.1	100.0
2004	Urban	Rate (people)		32.2 70.7 93.0	36.5 93.0					—	—	—	—	—	—	—	—		59.5 92.7 98.6			25.8	32.2	80.7	95.1	100.0
2004	Rural	Line		—	—					—	—	—	—	—	—	—	—		—			—	—	—	—	—
2004	Rural	Rate (households)	1	—	—				1	—	—	—	—	—	—	—	—	1	—			—	—	—	—	—
2004	Rural	Rate (people)		—	—					—	—	—	—	—	—	—	—		—			—	—	—	—	—
2004	Overall	Line		1,952 2,928 3,904	2,042 4,084					—	—	—	—	—	—	—	—		2,623 3,935 5,246			1,886	1,993	3,190	3,987	7,974
2004	Overall	Rate (households)	51	26.1 62.2 90.2	30.2 90.2				51	—	—	—	—	—	—	—	—	51	52.3 90.2 98.1			20.2	26.2	74.3	92.1	100.0
2004	Overall	Rate (people)		32.2 70.7 93.0	36.5 93.0					—	—	—	—	—	—	—	—		59.5 92.7 98.6			25.8	32.2	80.7	95.1	100.0
2009	Urban	Line		3,458 5,187 6,916	2,842 5,683					4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273 6,409 8,546			3,495	2,863	4,581	5,727	11,453
2009	Urban	Rate (households)	20	0.0 4.6 50.0	0.0 14.6				20	4.6	48.3	94.6	0.0	0.0	10.1	39.3	94.6	20	4.6 23.6 80.0			0.0	0.0	4.6	10.0	94.6
2009	Urban	Rate (people)		0.0 2.0 51.7	0.0 14.0					2.0	50.4	96.6	0.0	0.0	10.3	43.6	96.6		2.0 22.8 83.0			0.0	0.0	2.0	10.1	96.5
2009	Rural	Line		3,213 4,820 6,426	2,640 5,281					3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914 5,871 7,828			3,117	2,623	4,196	5,245	10,491
2009	Rural	Rate (households)	20	0.0 35.0 55.0	0.0 45.0				20	5.0	39.9	49.9	0.0	0.0	5.0	39.9	74.5	20	5.0 45.0 60.0			0.0	0.0	10.0	35.0	85.0
2009	Rural	Rate (people)		0.0 40.0 67.0	0.0 51.3					5.2	43.4	58.2	0.0	0.0	5.2	43.4	84.8		5.2 51.3 72.2			0.0	0.0	13.0	38.3	89.6
2009	Overall	Line		3,240 4,860 6,481	2,663 5,325					3,605	5,408	7,211	2,926	2,552	4,083	5,104	10,208		3,954 5,931 7,908			3,159	2,649	4,239	5,299	10,598
2009	Overall	Rate (households)	40	0.0 30.9 54.3	0.0 40.9				40	4.9	41.2	56.8	0.0	0.0	5.8	39.8	77.7	40	4.9 42.1 62.7			0.0	0.0	9.3	31.7	86.3
2009	Overall	Rate (people)		0.0 35.8 65.3	0.0 47.2					4.8	44.3	63.2	0.0	0.0	5.9	43.4	86.4		4.9 48.1 73.4			0.0	0.0	11.8	35.1	90.3
2011	Urban	Line		—	—					4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828 7,242 9,656			3,869	3,124	4,998	6,247	12,494
2011	Urban	Rate (households)	20	—	—				20	43.9	80.3	94.4	13.5	4.6	48.4	63.6	100.0	20	13.6 58.2 80.0			4.6	0.0	13.6	53.6	94.6
2011	Urban	Rate (people)		—	—					47.9	84.0	94.1	15.4	7.9	52.7	69.8	100.0		15.5 64.1 83.8			7.7	0.0	15.5	59.3	94.2
2011	Rural	Line		—	—					3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422 6,633 8,844			3,634	2,861	4,578	5,722	11,444
2011	Rural	Rate (households)	10	—	—				10	30.2	70.7	90.8	0.0	0.0	40.1	70.7	100.0	10	30.0 80.0 100.0			0.0	0.0	30.0	70.0	100.0
2011	Rural	Rate (people)		—	—					32.6	80.5	95.4	0.0	0.0	47.4	80.5	100.0		32.5 87.5 100.0			0.0	0.0	32.5	80.0	100.0
2011	Overall	Line		—	—					4,105	6,158	8,211	3,421	2,799	4,479	5,599	11,198		4,487 6,730 8,973			3,671	2,903	4,645	5,806	11,611
2011	Overall	Rate (households)	30	—	—				30	32.1	72.1	91.3	1.9	0.6	41.3	69.7	100.0	30	27.7 77.0 97.2			0.6	0.0	27.7	67.7	99.3
2011	Overall	Rate (people)		—	—					35.1	81.0	95.2	2.5	1.3	48.2	78.8	100.0		29.8 83.8 97.4			1.2	0.0	29.8	76.7	99.1
2012	Urban	Line		—	—					—	—	—	—	—	—	—	—		—			—	—	—	—	—
2012	Urban	Rate (households)	1	—	—				1	—	—	—	—	—	—	—	—	1	—			—	—	—	—	—
2012	Urban	Rate (people)		—	—					—	—	—	—	—	—	—	—		—			—	—	—	—	—
2012	Rural	Line		—	—					4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—			—	—	—	—	—
2012	Rural	Rate (households)	110	—	—				110	20.3	55.1	83.1	5.2	0.0	29.4	45.5	94.4	110	—			—	—	—	—	—
2012	Rural	Rate (people)		—	—					25.4	63.4	87.1	8.2	0.0	36.4	53.5	95.3		—			—	—	—	—	—
2012	Overall	Line		—	—					4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—			—	—	—	—	—
2012	Overall	Rate (households)	111	—	—				111	20.3	55.1	83.1	5.2	0.0	29.4	45.5	94.4	111	—			—	—	—	—	—
2012	Overall	Rate (people)		—	—					25.4	63.4	87.1	8.2	0.0	36.4	53.5	95.3		—			—	—	—	—	—

Figure 13 (Krong Pailin): Poverty lines and rates (old, government, and World-Bank definitions) by urban, rural, and all, for 2004, 2009, 2011, and 2012

Year	Urban or Rural	Line or rate for people or households	n	Old: Natl 100%	150%	200%	Intl $1.25	$2.50	n	Gov: Natl 100%	150%	200%	Median	Intl $1.25	$2.00	$2.50	$5.00	n	WB: Natl 100%	150%	200%	Median	Intl $1.25	$2.00	$2.50	$5.00
2004	Urban	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
		Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
		Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2004	Rural	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
		Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
		Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2004	Overall	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
		Rate (households)	2	—	—	—	—	—	2	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—
		Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2009	Urban	Line		3,458	5,187	6,916	2,842	5,683		4,352	6,528	8,704	3,573	3,080	4,929	6,161	12,321		4,273	6,409	8,546	3,495	2,863	4,581	5,727	11,453
		Rate (households)	20	4.8	24.5	55.2	4.8	39.7	20	9.7	39.5	64.5	4.7	4.7	9.7	34.1	74.2	20	14.5	34.5	55.2	4.8	4.8	14.5	29.7	74.5
		Rate (people)		6.2	33.5	64.1	6.2	47.5		13.4	50.7	69.8	6.0	6.0	13.4	43.7	78.1		22.7	44.2	60.8	6.2	6.2	22.7	40.1	78.3
2009	Rural	Line		3,213	4,820	6,426	2,640	5,281		3,493	5,240	6,986	2,828	2,472	3,956	4,945	9,889		3,914	5,871	7,828	3,117	2,623	4,196	5,245	10,491
		Rate (households)	20	10.0	35.0	80.0	0.0	45.0	20	10.0	35.0	75.0	0.0	0.0	15.0	35.0	100.0	20	20.0	60.0	90.0	5.0	5.0	20.0	40.0	95.0
		Rate (people)		7.1	35.3	85.9	0.0	45.9		10.6	38.8	77.6	0.0	0.0	17.7	38.8	100.0		17.7	61.2	94.1	2.4	2.4	17.7	42.4	97.7
2009	Overall	Line		3,272	4,908	6,544	2,689	5,377		3,684	5,526	7,367	2,994	2,607	4,172	5,215	10,429		4,000	6,000	8,000	3,207	2,680	4,289	5,361	10,722
		Rate (households)	40	8.9	32.7	74.5	1.1	43.8	40	9.9	35.9	72.8	1.0	1.0	13.9	34.8	94.7	40	18.8	54.3	82.2	5.0	5.0	18.8	37.7	90.4
		Rate (people)		6.9	34.9	80.7	1.5	46.3		11.2	41.5	75.9	1.3	1.3	16.7	39.9	95.1		18.9	57.1	86.1	3.3	3.3	18.9	41.8	93.0
2011	Urban	Line		—	—	—	—	—		4,911	7,367	9,822	3,930	3,349	5,358	6,698	13,395		4,828	7,242	9,656	3,869	3,124	4,998	6,247	12,494
		Rate (households)	20	—	—	—	—	—	20	36.0	60.7	70.4	10.4	0.0	41.1	55.8	94.9	20	30.3	65.6	70.5	5.1	0.0	35.4	55.6	85.3
		Rate (people)		—	—	—	—	—		49.6	72.6	80.2	16.3	0.0	54.3	66.7	96.9		42.6	77.0	81.6	9.5	0.0	69.3	69.3	92.3
2011	Rural	Line		—	—	—	—	—		3,953	5,930	7,906	3,325	2,696	4,313	5,391	10,782		4,422	6,633	8,844	3,634	2,861	4,578	5,722	11,444
		Rate (households)	10	—	—	—	—	—	10	0.0	30.7	70.6	0.0	0.0	0.0	30.7	90.9	10	20.0	60.0	90.0	0.0	0.0	30.0	30.0	90.0
		Rate (people)		—	—	—	—	—		0.0	43.5	83.8	0.0	0.0	0.0	43.5	98.2		22.5	71.4	98.0	0.0	0.0	42.9	42.9	98.0
2011	Overall	Line		—	—	—	—	—		4,107	6,160	8,213	3,422	2,800	4,481	5,601	11,201		4,488	6,731	8,975	3,672	2,903	4,646	5,807	11,614
		Rate (households)	30	—	—	—	—	—	30	8.2	37.5	70.5	2.4	0.0	9.3	36.4	91.8	30	22.4	61.3	85.6	1.2	0.0	31.2	35.8	88.9
		Rate (people)		—	—	—	—	—		8.0	48.2	83.2	2.6	0.0	8.7	47.2	98.0		25.7	72.3	95.3	1.5	0.0	43.8	47.1	97.1
2012	Urban	Line		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
		Rate (households)	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
		Rate (people)		—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—
2012	Rural	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
		Rate (households)	180	—	—	—	—	—	180	8.2	40.0	70.0	3.6	1.1	11.6	30.3	89.6	180	—	—	—	—	—	—	—	—
		Rate (people)		—	—	—	—	—		12.3	48.0	75.9	5.0	1.3	15.5	37.3	91.5		—	—	—	—	—	—	—	—
2012	Overall	Line		—	—	—	—	—		4,069	6,104	8,139	3,445	2,766	4,426	5,532	11,064		—	—	—	—	—	—	—	—
		Rate (households)	181	—	—	—	—	—	181	8.2	40.0	70.0	3.6	1.1	11.6	30.3	89.6	181	—	—	—	—	—	—	—	—
		Rate (people)		—	—	—	—	—		12.3	48.0	75.9	5.0	1.3	15.5	37.3	91.5		—	—	—	—	—	—	—	—