

Simple Poverty Scorecard[®] Tool Madagascar

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Voadika amin'ny teny Malagasy ao amin'ny <u>scorocs.com</u>ity tahiri-kevitra ity miaraka amin'ny fitaovana fanangonana antotan-kevitra.

Ce document en Français et l'outil de collecte des données sont disponibles sur <u>scorocs.com</u>
This document and a data-collection tool are in English at <u>scorocs.com</u>

Abstract

The Scorocs Simple Poverty Scorecard-brand poverty-assessment tool is a low-cost, transparent way for pro-poor programs in Madagascar to prove and improve their social performance by getting to know their participants better. Asking the scorecard's 11 questions takes about 10 minutes. The responses are used to estimate participants' consumption-based poverty rates, to track changes in poverty rates, or to segment participants for differentiated treatment.

Version note

This new scorecard for Madagascar is based on data from 2013. It should be used from now on, replacing the old scorecard in Schreiner (2015a) that was based on data from 2010. Estimates of change in which both baseline and follow-up use the new scorecard are expected to be about as accurate as those of a typical scorecard. Differences in the 2010 and 2013 data imply that change should not be estimated with a baseline from the old scorecard and a follow-up from the new scorecard.

Acknowledgements

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Scorocs[®] Simple Poverty Scorecard[®] Tool

Interview ID:		$\underline{\mathbf{Name}}$	<u>Identifie</u>	<u>er</u>
Interview date:	Participant:			
Country: M	DG Field agent:			
Scorecard: 0	02 Service point:			
Sampling wgt.:		Number of household mem	bers:	
Indicator		Response		Points
1. In what region does the	A. Vakinankaratra	-		0
household live?	B. Androy			4
	C. Analanjirofo, Melaky, S	Sava, or Sofia		5
	D. Analamanga, Anosy, A	tsimo-Andrefana, Atsimo-At	tsinanana, or Atsinanana	9
	E. Alaotra-Mangoro, Amo	ron'i Mania, Betsiboka, Itas	y, or Menabe	11
	F. Bongolava, Ihorombe, I	Matsiatra Ambony, or Vatov	ravy Fitovinany	14
	G. Boeny, or Diana			16
2. How many members doe	s the household have?	A	. Eight or more	0
			. Seven	5
			S. Six	7
			o. Five	11
			. Four	14
			. Three	20
			I. Two I. One	$\frac{27}{34}$
a.D. 1 111 1	1 1 1 1 1 0			
3. Do any household memb	pers have a disability?		. Yes . No	0 4
4 C +1 1- 1 1 (+1	h - h h 1 - f + h - f 1 -			
4. Can the male head (or t	text and write a short	A. No male head (nor hus B. No	band of the female head)	$0 \\ 1$
letter?	text and write a short	C. Yes		4
5. What is the main	A. Sod, or no roof	C. 165		0
material of the	•	ranches, reeds, bamboo, woo	d planks or cardboard	3
roof?	· -	ment, shingles, wood, or zinc		6
6. What is the		ass, crop residue, dung, does	,	0
household's main		electricity, LPG, natural gas		
cooking fuel?	other		,	3
7. What type of toilet	A. No toilet arrangement/	bush		0
arrangement does	B. Latrine without a slab/			2
the household	C. Latrine with slab (wash	nable or non-washable), com	posting latrine, self-	
use?		atrine over water, flush toilet	(regardless of drainage),	4
	bucket/pan, or oth	ner		
8. Does the household have	e a TV?		A. No	0
			B. Yes	8
9. How many tables does to	he household have?		A. None	0
			B. One	2
			C. Two or more	4
10. How many beds does the	ne household have?		A. None	0
			B. One	4
			C. Two	5
		, , , , , , , , , , , , , , , , , , , ,	D. Three or more	9
	ow many days has the hous	ehold eaten meat, fish, or	A. None	0
eggs?			B. One	2
			C. Two D. Three or more	5 8
	<i>C</i> : 1	4 (A) 2020 C	D. THIES OF HIOTS	<u>0</u>

Back-page Worksheet: Household Members and Disability Status

Fill out the scorecard header first. Include the interview's unique identifier (if known), the interview date, and the sampling weight of the participant (if known). Then record the full name and the unique identification number of the participant (who may differ from the respondent), of the participant's field agent (who may differ from you the enumerator), and of the service point that the participant uses (if known). Circle the response to the first scorecard question based on the region where the household lives.

Then read to the respondent: Please tell me the first names (or nicknames) of all the members of your household, starting with the head and his/her (eldest) spouse (if there is one). A household is one person or a group of persons—regardless of blood or marital relationships—who normally live together (usually eating the mid-day meal together and sleeping in the same compound) and who recognize the authority of a single person known as the head of the household.

Write down the first name/nickname of each member. Mark the male head (or the husband of the female head (if he exists). For each household member, ask "Does [NAME] have a disability?", and record the response.

Record the number of household members in the scorecard header next to "Number of household members:". Circle the response to the second scorecard question about the number of household members. Then circle the response to the third scorecard question about whether any household member has a disability.

Always apply the detailed instructions in the "Interview Guide".

First name or nickname	Head or spouse of head?	Does [NAME] have	a disability?
1.	Head (male)	No	Yes
1.	Head (female)	110	105
	Husband of female head		
2.	Wife (eldest) of male head	No	Yes
	Other		
3.	Other	No	Yes
4.	Other	No	Yes
5.	Other	No	Yes
6.	Other	No	Yes
7.	Other	No	Yes
8.	Other	No	Yes
9.	Other	No	Yes
10.	Other	No	Yes
11.	Other	No	Yes
12.	Other	No	Yes
13.	Other	No	Yes
14.	Other	No	Yes
Number of members:		Anyone has disabilit	y? No/Yes

Table 1: Conversion of scores to poverty likelihoods for World-Bank-definition poverty lines

										Poverty	likeliho	od (%)							
	Nat	tional (2013 c	<u>lef.)</u>	<u>Int</u>	1. 2005	PPP (2	2013 de	<u>ef.)</u>	Intl. 2	2011 PI	PP (201	13 def.)		Percent	ile-based	lines (20	13 def.)	
Score	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 \mathrm{th}$	$50 \mathrm{th}$	$60 \mathrm{th}$	$80 ext{th}$
0-22	98.6	99.8	99.9	100.0	99.9	100.0	100.0	100.0	100.0	99.8	100.0	100.0	100.0	42.1	68.7	90.4	95.9	98.6	99.8
23 – 27	93.4	98.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	99.7	99.9	100.0	100.0	24.0	48.9	79.8	89.9	95.2	99.8
28 – 29	88.4	96.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	99.1	99.9	100.0	100.0	18.5	33.8	72.4	85.0	91.7	99.7
30 – 32	87.4	96.6	99.5	99.9	99.5	99.9	100.0	100.0	100.0	98.8	99.9	100.0	100.0	11.6	28.3	64.5	80.2	90.0	99.4
33 – 34	86.6	96.2	99.4	99.8	99.4	99.9	100.0	100.0	100.0	98.3	99.8	100.0	100.0	10.9	26.8	61.1	76.9	88.5	99.0
35 - 36	80.9	92.5	98.9	99.7	98.5	99.9	100.0	100.0	100.0	96.5	99.7	100.0	100.0	8.9	19.3	54.1	72.8	84.1	96.9
37 - 38	74.3	92.3	98.6	99.7	98.4	99.9	100.0	100.0	100.0	95.5	99.7	100.0	100.0	7.8	16.4	46.8	62.7	77.1	96.1
39 – 40	65.9	86.1	98.2	99.6	98.0	99.9	100.0	100.0	100.0	94.6	99.6	100.0	100.0	6.7	13.1	38.8	54.7	69.9	95.4
41 - 42	62.0	83.2	97.4	99.4	97.3	99.9	100.0	100.0	100.0	93.2	99.4	100.0	100.0	4.7	11.2	34.0	50.8	66.3	94.5
43 - 44	55.1	78.5	96.1	99.1	95.5	99.9	100.0	100.0	100.0	88.8	99.1	100.0	100.0	2.8	9.3	27.3	41.0	59.7	91.2
45 - 46	48.0	74.4	94.8	98.5	94.1	99.7	100.0	100.0	100.0	86.1	98.5	100.0	100.0	2.8	7.0	23.3	34.9	52.1	88.6
47 - 48	44.3	69.1	93.6	97.7	93.6	99.2	99.7	100.0	100.0	82.7	97.7	100.0	100.0	2.7	7.0	18.9	31.4	49.2	85.9
49 – 50	35.4	60.1	91.6	97.7	90.2	99.0	99.5	99.9	100.0	76.3	97.7	99.6	100.0	2.0	4.7	16.4	26.5	38.9	81.3
51 – 52	32.2	55.9	90.5	97.2	89.4	98.1	99.5	99.9	100.0	74.9	97.2	99.6	100.0	2.0	4.5	13.6	21.8	36.7	81.3
53 – 54	27.1	50.3	81.0	93.8	78.7	96.3	98.6	99.9	100.0	63.2	93.8	99.6	100.0	2.0	4.4	11.2	17.8	31.3	68.3
55 - 56	19.2	36.3	77.0	92.3	73.6	95.5	98.5	99.9	100.0	54.7	92.3	99.5	100.0	0.8	3.4	9.8	14.1	21.3	60.8
57 - 59	15.7	28.8	69.6	87.0	66.8	93.4	98.1	99.9	100.0	45.3	87.0	98.9	100.0	0.2	1.4	6.2	9.5	18.3	49.4
60 – 62	9.7	25.7	63.2	82.4	59.8	91.1	96.1	99.8	100.0	42.2	82.4	97.3	100.0	0.2	1.0	5.2	7.7	11.4	45.8
63 – 65	7.7	13.4	45.0	76.2	43.0	85.1	92.7	99.0	99.5	24.5	76.4	95.8	100.0	0.1	0.9	5.0	5.8	8.1	29.2
66 – 68	5.4	11.1	37.8	61.6	34.2	72.6	85.4	98.3	98.7	20.7	61.6	90.9	100.0	0.0	0.6	3.2	4.1	5.8	23.8
69 - 73	3.6	7.6	26.1	48.0	24.5	60.0	75.2	96.5	97.5	14.4	48.2	81.8	99.8	0.0	0.4	1.6	2.2	4.0	17.3
74 - 100	2.6	4.9	12.7	24.4	12.2	33.4	50.4	91.9	93.1	7.9	24.5	64.4	98.8	0.0	0.1	0.6	1.0	3.0	8.6

Table 1: Conversion of scores to poverty likelihoods for INSTAT-definition poverty lines

										Poverty	likeliho	od (%)							_
	Nat	ional (2013 d	<u>lef.)</u>	<u>Int</u>	1. 2005	PPP (2013 de	<u>ef.)</u>	Intl. 2	2011 PI	PP (201	13 def.)		Percent				
Score	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	$_{ m 10th}$	$20 \mathrm{th}$	$40 \mathrm{th}$	$50 \mathrm{th}$	$60 \mathrm{th}$	$80 ext{th}$
0-22	97.7	99.4	99.7	99.9	99.7	99.9	100.0	100.0	100.0	99.6	99.9	100.0	100.0	44.3	67.0	91.0	95.3	98.2	99.7
23 – 27	93.6	98.3	99.5	99.7	99.3	99.8	99.9	100.0	100.0	99.1	99.7	99.9	100.0	26.8	50.6	79.9	90.7	94.8	99.1
28 – 29	87.8	94.7	98.9	99.6	98.7	99.7	99.8	100.0	100.0	96.9	99.6	99.8	100.0	17.3	36.5	71.5	83.3	89.4	97.7
30 – 32	86.8	94.7	98.9	99.6	98.6	99.7	99.8	100.0	100.0	96.9	99.6	99.8	100.0	11.7	29.0	64.9	78.7	88.4	97.7
33 - 34	86.1	94.7	98.9	99.6	98.4	99.7	99.8	100.0	100.0	96.9	99.6	99.8	100.0	10.4	28.7	60.7	76.6	88.3	97.3
35 - 36	79.4	90.1	97.5	99.1	96.9	99.4	99.5	99.9	99.9	93.4	99.1	99.7	100.0	8.0	17.5	54.0	68.7	82.5	95.2
37 - 38	73.6	89.6	97.5	99.1	96.9	99.4	99.5	99.9	99.9	93.4	99.1	99.7	100.0	7.0	14.4	44.5	61.7	77.0	95.2
39 – 40	63.5	84.5	97.5	99.1	96.9	99.4	99.5	99.9	99.9	93.4	99.1	99.7	100.0	6.0	13.0	38.9	51.8	68.4	95.2
41 – 42	59.3	82.5	96.9	99.0	96.2	99.1	99.4	99.8	99.9	91.2	98.9	99.5	100.0	3.4	9.9	32.6	48.8	64.0	93.6
43 – 44	53.0	79.2	94.8	98.0	92.9	98.7	99.2	99.8	99.9	86.7	97.6	99.4	100.0	1.7	8.0	26.6	41.6	59.4	89.2
45 - 46	42.6	68.7	92.1	96.2	88.7	98.5	99.2	99.8	99.9	80.3	96.1	99.4	100.0	1.7	5.2	19.0	33.9	47.9	83.6
47 - 48	41.5	65.1	92.1	95.9	88.7	97.4	98.8	99.7	99.8	76.3	95.7	99.1	100.0	1.6	5.2	17.4	28.8	44.7	82.1
49 – 50	34.6	56.7	88.0	95.9	84.8	97.3	98.5	99.6	99.7	69.2	95.3	98.8	99.9	1.4	3.3	13.3	24.1	39.1	76.6
51 – 52	29.1	54.4	86.0	95.5	83.2	97.3	98.5	99.6	99.7	67.3	94.4	98.8	99.9	1.2	3.0	11.7	21.8	34.2	74.2
53 – 54	26.4	50.7	81.6	93.6	77.6	94.8	97.7	99.6	99.6	58.0	92.5	98.5	99.9	1.0	2.7	9.7	17.8	30.8	64.6
55 - 56	16.5	35.7	71.0	88.6	67.6	92.7	97.3	99.5	99.5	48.5	86.9	98.5	99.9	0.5	1.0	7.8	10.4	19.5	55.9
57 - 59	12.5	28.5	65.3	85.9	61.5	92.1	96.8	99.5	99.5	40.9	84.2	98.5	99.9	0.0	0.7	4.8	8.3	14.3	50.4
60 – 62	9.0	21.9	56.5	79.0	50.7	84.9	94.4	99.3	99.3	33.9	76.9	96.5	99.8	0.0	0.4	2.8	6.4	10.1	40.4
63 – 65	4.9	12.1	48.0	75.1	42.3	82.4	91.5	98.2	98.3	22.0	71.3	93.8	99.4	0.0	0.3	2.8	3.9	5.3	29.7
66 – 68	4.3	10.4	38.1	61.3	34.0	67.7	83.1	97.8	98.0	16.5	58.6	92.2	99.2	0.0	0.0	2.2	2.9	5.0	23.1
69 - 73	3.3	7.9	24.8	49.1	21.5	58.0	74.2	97.0	97.3	10.8	46.8	81.1	99.2	0.0	0.0	1.2	1.8	3.8	14.6
74 - 100	0.6	2.5	10.3	22.1	8.5	29.9	47.9	89.0	90.2	4.2	19.3	59.1	98.9	0.0	0.0	0.0	0.5	0.8	5.0

Table 2: Errors in estimated poverty rates for World-Bank-definition poverty lines with a sample of a population of participants' households at a point in time, precision, and the α factor for precision

	Poverty lines																			
	Nat	ional	(2013	def.)	<u>In</u>	Intl. 2005 PPP (2013 def.)						P (201	3 def.)	Percentile-based lines (2013 def.)						
	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 \mathrm{th}$	$50 \mathrm{th}$	60 th	80th	
Error (estimate minus observed value)	-1.1	-1.2	0.0	0.0	-0.3	+0.1	0.0	+0.2	+0.1	-0.3	0.0	+0.2	0.0	0.0	0.0	-0.2	-0.6	-1.5	-0.2	
Precision of estimate	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.1	0.1	0.5	0.4	0.3	0.0	0.3	0.4	0.5	0.5	0.5	0.5	
Alpha factor for precision	0.82	0.81	0.85	0.88	0.85	0.92	0.99	1.13	1.07	0.82	0.88	1.00	0.84	1.02	0.92	0.85	0.85	0.81	0.83	

Scorecard applied to 1,000 bootstraps of n=16,384 from the validation sample.

Errors (differences between estimates and observed values) are in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of \pm percentage points.

Errors and precision estimated from 1,000 bootstraps with n=16,384.

Alpha is based on 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.

Table 2: Errors in estimated poverty rates for INSTAT-definition poverty lines with a sample of a population of participants' households at a point in time, precision, and the α factor for precision

	Poverty lines																		
	Nation	al (2013	def.)	<u>In</u>	Intl. 2005 PPP (2013 def.)					011 PP	P (201	3 def.)	Percentile-based lines (2013 def.)						
	Food 10	0% 150%	6 200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 \mathrm{th}$	$50 \mathrm{th}$	60 th	80th	
Error (estimate minus observed value)	-0.2 -0	0.8 +0.1	-0.2	+0.2	0.0	-0.3	-0.2	-0.2	0.0	-0.4	-0.6	0.0	+0.9	+1.0	+0.8	+0.4	-0.6	-0.3	
Precision of estimate	0.6	.5 0.5	0.4	0.5	0.4	0.3	0.1	0.1	0.5	0.4	0.2	0.1	0.3	0.4	0.5	0.6	0.6	0.5	
Alpha factor for precision	0.88 0.	84 0.90	0.97	0.87	0.97	1.02	0.93	0.97	0.85	0.95	1.01	1.06	0.94	0.93	0.92	0.92	0.86	0.88	

Scorecard applied to 1,000 bootstraps of n=16,384 from the validation sample.

Errors (differences between estimates and observed values) are in units of percentage points.

Precision is measured as 90-percent confidence intervals in units of \pm percentage points.

Errors and precision estimated from 1,000 bootstraps with n=16,384.

Alpha is based on 1,000 bootstrap samples of n = 256, 512, 1,024, 2,048, 4,096, 8,192, and 16,384.

Scorocs[®] Simple Poverty Scorecard[®] Tool Madagascar

1. Introduction

The Scorocs Simple Poverty Scorecard poverty-assessment tool for Madagascar is a low-cost, transparent way for pro-poor programs to get know their participants better and so to prove and improve their social performance.

The scorecard can be used to estimate the likelihood that a participant has consumption below a given poverty line, to estimate participants' poverty rate at a point in time, to estimate the change in participants' poverty rate over time, and to segment participants for differentiated treatment.

The direct approach to poverty assessment via consumption surveys is difficult and costly. A case in point is the 2013 Enquête Nationale sur le Suivi des Indicateurs des Objectifs du Millénaire pour le Développement (ENSOMD, National Follow-up Survey of the Millennium Development Goals) by Madagascar's Institut National de la Statistique (INSTAT). The 2013 ENSOMD runs about 70 pages and covers more than 700 top-level questions, most of which have several follow-up questions or are repeated several times (for example, for each household member, each expenditure item, or each crop type).

Estimates that use the new scorecard for both baseline and follow-up are fine.

¹ As explained in the "Version Note", users should avoid hybrid estimates of change based on a baseline from the old scorecard and a follow-up from the new scorecard.

In comparison, the scorecard's indirect approach is quick and low-cost. It uses 11 verifiable questions drawn from the 2013 ENSOMD such as "What is the main material of the roof?" and "How many tables does the household have?". Responses to the questions are used to get a score that is correlated with consumption-based poverty status as measured by the exhaustive INSTAT survey.

The scorecard differs from "proxy-means tests" (Coady, Grosh, and Hoddinott, 2004) in that it is transparent, it is freely available, 2 and it is tailored to the capabilities and purposes not of national governments but rather of local pro-poor organizations in Madagascar. The feasible poverty-assessment options for such organizations are typically blunt (such as rules based on land ownership or housing quality) or subjective and relative (such as participatory wealth ranking facilitated by skilled field workers). Poverty estimates from these approaches may be costly, their accuracy is unknown, and they are not comparable across places, programs, nor time.

The scorecard is a low-cost, consumption-based, quantitative way to estimate the share of a program's participants who are below a given poverty line. Examples of such poverty lines include Madagascar's national line (defined differently by INSTAT and by the World Bank) and the World Bank's "international extreme poverty line" of \$1.90 per person per day 2011 PPP. The scorecard can also be used to estimate changes in poverty rates. While consumption surveys are costly even for governments, some pro-

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poor programs may be able to implement the low-cost scorecard to help with monitoring poverty and (if desired) segmenting clients for differentiated treatment.

The scorecard's technical approach aims to be understood by non-specialists. After all, if program managers are to adopt the scorecard on their own and apply it to inform their decisions, then they must first trust that it works. Transparency and straightforwardness build trust. Getting "buy-in" matters; proxy-means tests and regressions on the "determinants of poverty" have been around for decades, but they are rarely used to inform decisions by pro-poor organizations. This is not because these tools do not work, but because they are often presented (when they are presented at all) as tables of regression coefficients incomprehensible to non-specialists (with cryptic question names such as "LGHHSZ_2" and with points with negative values and many decimal places). Thanks to the predictive-modeling phenomenon known as the "flat maximum", approaches that are straightforward and transparent are usually about as accurate as approaches that are complex and opaque (Schreiner, 2012a; Caire and Schreiner, 2012).

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

The scorecard is based on data from Madagascar's 2013 ENSOMD. Questions are selected to be:

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

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

The scorecard can be used to estimate three basic quantities. First, it can estimate the *poverty likelihood* of a particular participant's household. This 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 population of participants' households at a point in time. This estimate is the average of the estimated poverty likelihoods among a representative sample of participants' households from the population. Person-level (head-count) poverty rates can also be estimated, and these in turn can provide estimates of the number of poor people in the households of a program's participants.

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

years) between the average interview date in the baseline sample and the average interview date in the follow-up sample.

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

Estimates of the annual rate of change in person-level (head-count) poverty rates can also be estimated, and these in turn can provide estimates of the annual net number of poor people in participating households who rise from below a poverty line to above it.

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

This paper presents a single scorecard whose questions and points are based on 100% of the World-Bank-definition national poverty line and data from a random sample of three-fifths of households in the 2013 ENSOMD. Scores from this one scorecard are calibrated with this same three-fifths of households from the ENSOMD to poverty likelihoods for 38 poverty lines (19 by the World-Bank definition and 19 by the INSTAT definition). Data from the other two-fifths of households in the 2013 ENSOMD is used to validate the scorecard's accuracy for estimating poverty rates at a point in time, and for segmenting participants.

Given their assumptions, all three scorecard-based estimators (the poverty likelihood of a participant's household, the poverty rate at a point in time of a population of participants' households, and the change in the poverty rate over time of a population of participants' households) are *unbiased*. That is, the true value matches the average of estimates in repeated samples from a single, unchanging population in which the relationship between scorecard questions and consumption-based poverty is unchanging. Like all predictive models, the scorecard has estimation errors when applied (as in this paper) to a validation sample. Furthermore, it makes errors to some unknown extent when applied (in practice) to a different population or when applied after 2013 (because the relationships between questions and poverty change over time and across populations). As warned in the "Version Note", hybrid estimates of change over time for Madagascar with a baseline from an old scorecard and a follow-up from the new scorecard should not be used.

Thus, while the indirect-scorecard approach is less costly than the direct-survey approach, the scorecard has estimation errors when applied in practice. (Observed values from the direct-survey approach are taken as correct, ignoring sampling variation.) There are errors because the scorecard incorrectly acts as if future relationships between questions and consumption-based poverty in all populations will

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³ Examples include nationally representative samples at a later point in time and subpopulations that are not nationally representative (Diamond *et al.*, 2016; Tarozzi and Deaton, 2009).

be the same as in the construction data. Of course, this unavoidable assumption holds only partly.

The average error in the scorecard's estimated poverty rate at a point in time (that is, the average of differences between estimated and observed values across 1,000 bootstrap samples of n = 16,384 from the validation sample) for 100% of the World-Bank-definition national poverty line at the household level is -1.2 percentage points. The average across all 38 poverty lines of the absolute values of the average error is about 0.3 percentage points. The maximum of the absolute values of the average error is 1.5 percentage points, and the errors for 34 of 39 lines are less than 1 percentage point. These estimation errors are due to sampling variation, not bias; the average error would be zero if the whole 2013 ENSOMD were to be repeatedly re-fielded and redivided into sub-samples before repeating the entire process of constructing and validating the resulting scorecards.

With n=16,384, the 90-percent confidence intervals are ± 0.6 percentage points or smaller. For n=1,024, the 90-percent intervals are ± 2.3 percentage points or smaller.

Section 2 below documents data and poverty lines. It also explains how to estimate person-level (head-count) poverty rates. Sections 3 and 4 describe scorecard construction and offer guidelines for implementation. Sections 5 and 6 tell how to estimate poverty likelihoods for individual households and poverty rates at a point in time for a population of participants' households. Section 7 discusses estimating changes in a poverty rate for a population of participants' households. Section 8 covers targeting. The last section is a summary.

The "Interview Guide" (found after the "References") tells how to ask questions—and how to interpret responses—so as to mimic practice in Madagascar's 2013

ENSOMD as closely as possible. The "Interview Guide" (and the "Back-page

Worksheet") are integral parts of the scorecard for Madagascar.

2. Data and poverty lines

This section presents the data used to construct and validate the scorecard. It also describes how to estimate person-level (head-count) poverty rates, the definition of poverty, and the 38 poverty lines to which scores are calibrated.

2.1 Data

Questions and points for the scorecard are selected (constructed) based on data from a random three-fifths of the 16,908 households in the 2013 ENSOMD,

Madagascar's most-recent available national household consumption survey. These same three-fifths of households are also used to associate (calibrate) scores with poverty likelihoods for all poverty lines.

Data from the other two-fifths of households from the 2013 ENSOMD is used to test (validate) the scorecard's accuracy for point-in-time estimates of poverty rates out-of-sample, that is, with data that is not used in construction nor calibration. Data from those same two-fifths of households are also used for out-of-sample tests of targeting accuracy.

The 2013 ENSOMD was fielded from November 22, 2012 to January 22, 2013.

Consumption is in prices in urban Antananarivo during the 2013 ENSOMD fieldwork.

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

A poverty rate is the share of units in households in which total household consumption (divided by the number of household members) is below a given poverty line. The unit of analysis is either the household itself or a person in the household. It is assumed that all members in a given household have the same poverty status and the same estimated poverty likelihood.

For most pro-poor programs, the most-relevant unit of analysis is the person. It is people who suffer from poverty. Households are not conscious entities, and households do not suffer except inasmuch as their human members do. As explained below, person-level estimates are a weighted average of households' poverty likelihoods, where each household's weight is the number of relevant members in the household.

Point-in-time estimates of poverty rates are usually more relevant for newly-participating households that join a pro-poor program in the current time period than for on-going participants who joined in past periods. This is because a pro-poor mission implies serving a clientele with some desired minimum poverty rate among new participants. A pro-poor mission also implies a desire to reduce poverty, for which estimates of changes in poverty rates for on-going participants are relevant.

Estimates of poverty rates (at a point in time for new participants, or for changes over time for on-going participants) are important, but estimates of the *number* of poor people (for new participants) and of the *annual net number of people who exit* poverty (for on-going participants) are even more important. This is because—for given

levels or changes in poverty rates—a larger pro-poor program does more good than a smaller pro-poor program. After all, the end goal of a pro-poor program is not to have a high poverty rate among new participants nor a high rate of exit from poverty among on-going participants but rather to have many new participants who are poor and then to reduce the poverty of many on-going participants who were poor when they joined.⁴

To illustrate the calculation of scorecard estimates, suppose that a brand-new pro-poor program in its first year enrolls participants from 1,000 households that encompass a total of 5,000 household members. The program applies the scorecard to a simple random sample of two households from among the 1,000.

The first sampled household has three members, one of whom is a program participant. For a given a scorecard and poverty line, suppose that the first household's estimated poverty likelihood is 60.0 percent.

The second sampled household has four members, two of whom are program participants. With the same given scorecard and poverty line, suppose that the second household's estimated poverty likelihood is 40.0 percent.

2.2.1 Household-level estimates

Poverty rates are in terms of either households or people. In the uncommon case that a program defines its *participants* as households, the household level is relevant.

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⁴ Schreiner (2014) discusses how to report and analyze scorecard estimates.

⁵ Such a small sample gives unreliable estimates but simplifies the example's math.

The estimated household-level poverty rate is the weighted average of estimated poverty likelihoods across households with participants. In the example here, this is $\frac{1 \cdot 0.600 + 1 \cdot 0.400}{1 + 1} = \frac{1}{2} = 0.5 = 50 \text{ percent.}$

In the " $1 \cdot 0.600$ " term in the numerator, "1" is the first household's household-level sampling weight, and "0.600" is the first household's estimated poverty likelihood from the scorecard (60.0 percent).

In the " $1 \cdot 0.400$ " term in the numerator, "1" is the second household's household-level sampling weight, and "0.400" is the second household's poverty likelihood (40.0 percent).

The "1+1" in the denominator is the sum of the household-level sampling weights of the two households. Household-level sampling weights are used because the unit of analysis is the household.

With an estimated household-level poverty rate of 50.0 percent and a population of 1,000 newly-participating households, the estimated number of newly-participating poor households is $0.500 \cdot 1,000 = 500$.

Now suppose that another representative sample of the same population of formerly-new, now-on-going participants⁷ is scored exactly two years later and that the

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

⁷ This example assumes no attrition. In practice, some participants do drop out, and this does not happen at random. In general, there is no way to eliminate error in scorecard estimates due to non-random attrition, but in some cases it can be mitigated.

resulting household-level estimated poverty rate is 45.0 percent. Then the annual net number of households who exit poverty is $(0.500 - 0.450) \cdot 1,000 \div 2 = 25$ households per year. Here, (0.500 - 0.450) is the decrease in the household-level poverty rate in the period from baseline (50.0 percent) to follow-up (45.0 percent), 1,000 is the number of on-going households in the population across the two periods, and 2 is the number of years between the two periods.

2.2.2 Person-level estimates

Alternatively, a person-level (head-count) poverty rate is relevant if all members of a participating household are affected by any household member's participation. This is usually the relevant case.

In the example here, the person-level rate is the household-size-weighted⁸ average of estimated poverty likelihoods for households with participants, that is,

$$\frac{3 \cdot 0.600 + 4 \cdot 0.400}{3 + 4} = \frac{3.4}{7} = 0.486 = 48.6 \text{ percent.}$$

In the " $3 \cdot 0.600$ " term in the numerator, "3" is the first household's person-level sampling weight because the first household has three members, and "0.600" is the first household's estimated poverty likelihood from the scorecard.

In the " $4\cdot0.400$ " term in the numerator, "4" is the second household's person-level sampling weight because the second household has four members, and "0.400" is the second household's poverty likelihood.

⁸ Given simple random sampling at the household level, a household's person-level weight is the number of people who are members of the household.

The "3 + 4" in the denominator is the sum of the person-level sampling weights of the two households. Person-level sampling weights are used because the unit of analysis is the household member.

With an estimated person-level poverty rate of 48.6 percent and a population of 5,000 people who are members of newly-participating households, the estimated number of newly-participating poor people is $0.486 \cdot 5,000 = 2,430$ people.

If the scorecard is applied exactly two years later to a representative sample of the same population of formerly-new, now-on-going participants, and if the resulting person-level estimated poverty rate is 45.0 percent, then the annual net number of people who exit poverty is $(0.486 - 0.450) \cdot 5,000 \div 2 = 90$ people per year. Here, "(0.486 - 0.450)" is the reduction in the person-level poverty rate in the period from baseline (48.6 percent) to follow-up (45.0 percent), "5,000" is the number of on-going people in the population across the two periods and "2" is the number of years between the two periods.

Because greater household size both causes poverty and is caused by poverty, person-level poverty rates almost always exceed household-level poverty rates. And because people (not households) experience poverty, person-level estimates are almost always more relevant than household-level estimates.

2.2.3 Participant-level estimates

Finally, a pro-poor program might count as *participants* only those household members who directly participate in the program. In practice, this case is rarely relevant.

For the example here, this means that some—but not all—household members are counted. The estimated participant-level poverty rate is then the participant-weighted average⁹ of the estimated poverty likelihoods of households with participants, that is, $\frac{1 \cdot 0.600 + 2 \cdot 0.400}{1 + 2} = \frac{1.4}{3} = 0.467 = 46.7$ percent.

The "1" in the " $1 \cdot 0.600$ " in the numerator is the first household's participant-level sampling weight because the first household has one participant. The "0.600" is the first household's poverty likelihood (60 percent).

The "2" in the " $2 \cdot 0.400$ " in the numerator is the second household's participant-level sampling weight because the second household has two participants. The "0.400" is the second household's poverty likelihood from the scorecard (40 percent).

The "1+2" in the denominator is the sum of the participant-level sampling weights of the two households. Participant-level sampling weights are used because the unit of analysis is the participant.

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⁹ Given simple random sampling at the household level, a household's participant-level weight is the number of participants in that household.

In almost all cases, either only one household member participates (in which case the participant-level estimates are the same as the household-level estimates) or all household members participate (in which case the participant-level estimates are the same as the person-level estimates).

To sum up, estimated poverty rates from a scorecard are weighted averages of households' estimated poverty likelihoods, where—assuming simple random sampling at the household level—the weights are the number of relevant units in the household. People matter more than households; estimates of the number of newly-participating poor people matters more than estimates of poverty rates at a point in time; and estimates of the annual reduction in the net number of on-going poor people matter more than estimates of changes in poverty rates.

When reporting scorecard-based estimates, pro-poor programs should clearly state the unit of analysis—whether households, household members, or participants—and explain why that unit is relevant. In most cases, the unit of analysis is household members because participation in a pro-poor program by any member of a given household usually affects all the people who are members of that household and because poverty is experienced by people, not households.

To help with benchmarking, Table 3 reports poverty lines and poverty rates for households and people in the 2013 ENSOMD. There is a version of Table 3 for Madagascar as a whole and for each of Madagascar's 22 regions.

Household-level poverty rates are reported because—as shown above— sampling is almost always done at the level of households and because 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 Table 3 because these are the rates reported by the government of Madagascar and by the World Bank and because person-level rates are almost always the most-relevant for pro-poor programs. Furthermore, popular discussions and policy discourse usually proceed in terms of person-level rates, and the goal of pro-poor programs is to help people (not households) to improve their well-being.

2.3 Definition of poverty, and poverty lines

A household's *poverty status* as poor or non-poor depends on whether its consumption (MGA per person per day) is below a given poverty line. Thus, a definition of *poverty* is a poverty line together with a measure of consumption.

The definition of consumption and the consumption modules in the 2013 ENSOMD questionnaire are "essentially identical" to that of Madagascar's 2010 Enquête Périodique auprès des Ménages (EPM, Periodic Household Survey) that was used to construct the old scorecard (Schreiner, 2015a). 10

 10 INSTAT (2014, p. 120) lists the classes of items in aggregate household consumption.

INSTAT (2014, p. 136) compares head-count poverty rates from the 2010 EPH and the 2013 ENSOMD for INSTAT-definition national poverty lines. Belghith, Randriankolona, and Osborne ("BRO", 2016), however, point out that these poverty estimates are not comparable due to a number of differences, and in particular to differences in the representativeness of the two surveys' and in their sampling weights. Thus, pro-poor programs in Madagascar should not estimate changes in poverty over time with a baseline estimate from the old scorecard and a follow-up estimate from the new scorecard. Estimates of change in which both baseline and follow-up come from Madagascar's new scorecard may still be expected to be about as accurate as those of the typical scorecard.

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¹¹ BRO (2016) correct the sampling weights for both surveys to get comparable estimates, but the old scorecard was made with non-comparable data. The new scorecard uses the corrected weights for both INSTAT-definition lines and World-Bank-definition lines. Thus, poverty rates here match BRO but not INSTAT (2014).

Because pro-poor programs in Madagascar may want to use different or various poverty lines, this paper calibrates scores from its single scorecard to poverty likelihoods for 38 lines, 19 using the INSTAT definition and 19 using the World-Bank definition:

- Food line
- 100% of the national line
- 150% of the national line
- 200% of the national line
- \$1.25/day 2005 PPP
- \$2.00/day 2005 PPP
- \$2.50/day 2005 PPP
- \$5.00/day 2005 PPP
- \$8.44/day 2005 PPP
- \$1.90/day 2011 PPP
- \$3.20/day 2011 PPP
- \$5.50/day 2011 PPP
- \$21.70/day 2011 PPP
- First-decile (10th-percentile) line
- First-quintile (20th-percentile) line
- Second-quintile (40th-percentile) line
- Median (50th-percentile) line
- Third-quintile (60th-percentile) line
- Fourth-quintile (80th-percentile) line

2.3.1 National poverty lines

2.3.1.1 INSTAT definition

The derivation of Madagascar's INSTAT-definition national poverty line (hereafter, "100% of the INSTAT-definition national line") follows the "cost-of-basic-needs" method of Ravallion (1998). It begins with an INSTAT-definition food-poverty line defined as the cost of 2,133 Calories from the average food basket consumed by households in the lowest three deciles of total consumption in the 2001 EPM (Stifel, Razafimanantena, and Rakotomanana, 2013). This cost is then converted to prices

during the 2013 ENSOMD fieldwork using Madagascar's Consumer Price Index,¹² giving an average INSTAT-definition food poverty line¹³ in prices in urban Antananarivo during the 2013 ENSOMD of MGA962 per person per day (Table 3). The corresponding poverty rates are 46.6 percent for households and 57.2 percent for people.¹⁴

100% of the INSTAT-definition national line is defined as this INSTAT-definition food line, plus a non-food component derived via the "Engel regression method" of Ravallion (1998). This is the non-food consumption estimated from data in the 2013 ENSOMD for households whose total consumption (not food consumption) is at the INSTAT-definition food line (World Bank, 2014; INSTAT, 2003, p. 114).

Both the INSTAT-definition food line and the 100% of the INSTAT-definition national line (food-plus-non-food line) are adjusted for price differences in urban and rural areas in each of Madagascar's 22 regions. On average, 100% of the INSTAT-definition national line is MGA1,266 per person per day, giving poverty rates of 61.2 percent for households and 71.2 percent for people (Table 3).¹⁵

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¹² The CPI covers only seven major urban areas, but prices vary a lot across rural areas (World Bank, 2014). Nevertheless, a region-specific CPI based on data from the 2001 and 2010 EPM leads to a national poverty line for the 2010 EPM that gives almost the same person-level poverty rate as the official one.

 $^{^{\}scriptscriptstyle 13}$ INSTAT (2014) calls this the "extreme" poverty line.

¹⁴ INSTAT (2014, pp. xiii and 135) reports a much-lower head-count rate (52.7 percent) for the food line. Beyond the use of the corrected weights from BRO (2016), this difference may stem from INSTAT's comparing the food line with food consumption rather than with total consumption.

¹⁵ INSTAT (2014, pp. xiii and 135) has a slightly higher head-count rate (71.5 percent). The rate here matches BRO (2016, p. 13).

2.3.1.2 World-Bank definition

The World-Bank-definition food line corrects for a number of issues with the INSTAT-definition food line (BRO, 2016). The World-Bank-definition food line is MGA941 per person per day, giving a household-level poverty rate of 47.8 percent and a person-level rate of 57.4 percent.¹⁶

100% of the World-Bank-definition national poverty line is derived in the same way as the 100% of the INSTAT-definition national line, but with the improvements of BRO (2016). The World-Bank line is MGA1,219 per person per day, with a household-level poverty rate of 61.9 percent and a head-count rate of 70.7 percent.¹⁷

The World-Bank-definition poverty lines are to be preferred to the INSTAT-definition lines. The new scorecard here is constructed based on 100% of the World-Bank-definition national line, and that line is used in all the examples. Pro-poor programs in Madagascar should use the World-Bank-definition lines with the scorecard.

 $^{^{\}scriptscriptstyle 16}$ The person-level rate here matches BRO (2016, p. 33).

¹⁷ The person-level rate here matches BRO (2016, p. 32).

2.3.2 International 2005 PPP poverty lines

International PPP lines are derived from:

- PPP exchange rates for Madagascar for "individual consumption expenditure by households":
 - $-2005 \text{ PPP:}^{18} \text{ MGA756.381 per } \1.00
 - 2011 PPP: 19 MGA704.913 per \$1.00
- Average all-Madagascar Consumer Price Index²⁰ (CPI) in calendar-years:
 - 2005: 62.92
 2010: 100.00
 2011: 109.48
 During 2013 ENSOMD: 118.48
 - Average all-Madagascar spatial price deflators:
 - INSTAT definition: 0.8625— World-Bank definition: 0.8481
- Person-weighted average urban and rural spatial price deflators for each region, derived from nominal and deflated consumption as provided by INSTAT. Only the example of rural Alaotra Mangoro is reported here:
 - INSTAT definition: 0.6410— World-Bank definition: 0.7114

2.3.2.1 INSTAT definition

The INSTAT-definition \$1.25/day 2005 PPP line for a given urban or rural area

$$\label{eq:energy_equation} \text{in a given region is $\$1.25 \cdot 2005 \ PPI \ factor} \cdot \frac{\text{Deflator}_{\text{Area-Region}}}{\text{Ave. deflator}} \cdot \frac{\text{CPI}_{\text{ENSOMD}}}{\text{CPI}_{2005}}.$$

For the example of rural Alaora Mangoro, the INSTAT-definition \$1.25/day line

is
$$\$1.25 \cdot 756.381 \cdot \frac{0.6410}{0.8625} \cdot \frac{118.48}{62.92} = MGA1,323.$$

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iresearch.worldbank.org/PovcalNetPPP2005/Detail.aspx?Format=Detail&C0=MDG_3&PPP0=756.38&PL0=1.25&Y0=2010&NumOfCountries=1, retrieved 8 August 2020.

¹⁹ iresearch.worldbank.org/PovcalNet/Detail.aspx?Format=Detail&C0=MDG_3&PPP0=704.913&PL0=1.90&Y0=2012&NumOfCountries=1, retrieved 8 August 2020.

²⁰ Base = 100 in calendar-year 2010, data.imf.org/regular.aspx?key=61545861, retrieved 15 March 2019.

For Madagascar overall, the average INSTAT-definition \$1.25/day line is MGA1,780 per person per day, giving a household-level poverty rate of 77.1 percent and a person-level poverty rate of 84.3 percent (Table 3).

These lines and rates cannot be compared with those of the World Bank's PovcalNet²¹ because PovcalNet does not report \$1.25/day figures based the 2013 ENSOMD.

INSTAT (2014) reports three head-count poverty rates for its INSTAT-definition \$1.25/day 2005 PPP line.²² All are much lower than the 84.3 percent here:

- 68.0 percent (pp. xi and 6, and Table A.1.1.8)
- 63.7 percent (Table A.1.8.1)
- 77.1 percent (pp. xiii, 135, and 137)

This paper documents the derivation of its head-count rate for this line, so it is more credible than any of the three in INSTAT (2014).

The INSTAT-definition 2005 PPP poverty lines for 2.00/day, 2.50/day, and 5.00/day are multiples of the INSTAT-definition 1.25/day line.

\$8.44/day is the 75th percentile of worldwide per-capita income (not consumption) as estimated by Hammond *et al.* (2007). The \$8.44/day 2005 PPP line is used by the International Finance Corporation as a benchmark for the "bottom of the pyramid". While the "\$1.25" aspect of the \$1.25 2005 PPP standard is in prices in

²¹ iresearch.worldbank.org/PovcalNetPPP2005/, retrieved 8 August 2020.

²² Reporting three rates is odd; the single most-important purpose of INSTAT (2014) and the 2013 ENSOMD is to report the poverty rate by \$1.25/day 2005 PPP.

calendar-year 2005, the "\$8.44" aspect of the \$8.44 2005 PPP standard is in prices in calendar-year 2010. 23

The average CPI for calendar-year 2010 is 100.00, and the average CPI for the 2013 ENSOMD is 118.48, so the all-Madagascar INSTAT-definition $\$8.44/\text{day}\ 2005$ PPP line is $\$8.44 \cdot 756.318 \cdot \left(\frac{118.48}{100.00}\right) = \text{MGA7,564}$. This gives a household-level poverty rate of 99.2 percent and a person-level poverty rate of 99.5 percent. The World-Bank-definition $\$8.44/\text{day}\ 2005$ PPP line (presented below) is preferred to the INSTAT-definition $\$8.44/\text{day}\ 100.00$ line.

2.3.2.2 World-Bank definition

The World-Bank-definition \$1.25/day 2005 PPP line for a given urban or rural area in a given region is derived in the same was as the INSTAT-definition \$1.25/day line, but it uses the World-Bank-definition deflators and the World-Bank-definition measure of consumption (BRO, 2016).

For the example of rural Alaora Mangoro, the World-Bank-definition \$1.25/day line is $$1.25 \cdot 756.381 \cdot \frac{0.7114}{0.8481} \cdot \frac{118.48}{62.92} = MGA1,493.$

For Madagascar overall, the average World-Bank-definition \$1.25/day line is MGA1,780 per person per day²⁴, giving a household-level poverty rate of 79.1 percent and a person-level poverty rate of 84.9 percent (Table 3).

²³ datatopics.worldbank.org/consumption/detail#consumptionsegments and datatopics.worldbank.org/consumption/detail#datastandardization, both retrieved 8 August 2020.

BRO (2016, p. 14) report a head-count rate for this line of 83.9 percent, 1 percentage point less than here. BRO does not document its derivation of this line (nor the line's value in MGA), but it may differ from this paper's line in two ways.

First, BRO may inflate the 2005 PPP factor from calendar-year 2005 to the period of the 2013 ENSOMD fieldwork using PovcalNet's factors for calendar-year 2005 (0.574726) and calendar-year 2012 (1.05714), giving a deflator of 1.05714 \div 0.574726 = 1.839. This differs from the higher—and preferred—factor used here (118.48 \div 62.92 = 1.883) based on CPIs for calendar-year 2005 and for the actual period of the 2013 ENSOMD fieldwork.

Second, BRO use a single, all-Madagascar line; they do not adjust for urban/rural price differences in each region. Relative to the scorecard's line, this lowers BRO's line (and decreases its poverty rate) in less-poor regions such as Antananarivo and raises the line (and increases the poverty rate) in more-poor regions such as rural areas.

Which \$1.25/day line is to be preferred? Temporal price deflators should match to the actual period of the 2013 ENSOMD fieldwork. Also, if it makes sense to adjust poverty lines for price differences across geographic regions at the level of countries (the purpose of international PPP lines in the first place), then it also makes sense to adjust for regional differences within a given country. Finally, a documented derivation is

²⁴ This is the same as the INSTAT-definition \$1.25/day 2005 PPP line.

 $^{^{25}}$ iresearch.worldbank.org/PovcalNet/Docs/CountryDocs/MDG.htm#3, retrieved 8 August 2010

susceptible to critique and improvement and so is to be preferred to an undocumented derivation. All three factors favor this paper's World-Bank \$1.25/day 2005 PPP line and its associated poverty rate.

The World-Bank-definition 2005 PPP poverty lines for \$2.00/day, \$2.50/day, \$5.00/day are multiples of the World-Bank-definition \$1.25/day line. The World-Bank definition \$8.44/day 2005 PPP line is derived in the same way as the INSTAT-definition \$8.44/day 2005 PPP line, using the corrected data from BRO.

2.3.3 International 2011 PPP poverty lines

2.3.3.1 INSTAT definition

The INSTAT-definition \$1.90/day 2011 PPP line for a given urban or rural area in a given region is $$1.90 \cdot 2011 \text{ PPI factor} \cdot \frac{\text{Deflator}_{\text{Area-Region}}}{\text{Ave. deflator}} \cdot \frac{\text{CPI}_{\text{ENSOMD}}}{\text{CPI}_{2011}}$.

For the example of rural Alaora Mangoro, the INSTAT-definition \$1.90/day line is $$1.90 \cdot 704.913 \cdot \frac{0.6410}{0.8625} \cdot \frac{118.48}{109.48} = MGA1,077.$

For Madagascar overall, the average INSTAT-definition \$1.90/day line is MGA1,449 per person per day, giving a household-level poverty rate of 67.9 percent and a person-level poverty rate of 76.9 percent (Table 3).

PovcalNet reports a similar \$1.90/day line (MGA1,416) and a similar head-count poverty rate (77.6 percent). As noted above, PovcalNet may use temporal deflators based on calendar-year 2012 (rather than the three months in late 2012 and early 2013).

26

iresearch.worldbank.org/PovcalNet/Detail.aspx?Format=Detail&CO=MDG_3&PPP0=704.913&PL0=1.90&Y0=2012&NumOfCountries=1, retrieved 8 August 2020.

when the ENSOMD was actually in the field). Although it is not documented, PovcalNet also typically uses a single, all-country \$1.90/day line, even though (as noted above) it makes sense to adjust for urban/rural price differences by region. For these reasons, the \$1.90/day 2011 PPP results here are to be preferred to those of PovcalNet.

The INSTAT-definition 2011 PPP poverty lines for 3.20/day, 5.50/day, and 21.70/day are multiples of the INSTAT-definition 1.90/day line.

2.3.3.2 World-Bank definition

The World-Bank-definition \$1.90/day 2011 PPP line for a given urban or rural area in a given region is derived in the same way as the INSTAT-definition line, but it uses the World-Bank-definition deflators and the World-Bank-definition measure of consumption.

For the example of rural Alaora Mangoro, the World-Bank-definition \$1.90/day line is $$1.90 \cdot 704.913 \cdot \frac{0.7114}{0.8481} \cdot \frac{118.48}{109.48} = MGA1,216.$

For Madagascar overall, the average World-Bank-definition \$1.90/day line is MGA1,449 per person per day²⁸, giving a household-level poverty rate of 70.6 percent and a person-level poverty rate of 78.0 percent (Table 3).

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 $^{^{27}}$ Jolliffe and Prydz (2016) discuss the World Bank's choice of the four 2011 PPP lines.

 $^{^{28}}$ This is the same as the INSTAT-definition \$1.90/day 2011 PPP line.

BRO (2016, p. 14) report a similar a head-count rate for this line (78.8 percent), even though they use a single, all-Madagascar line and may—as discussed above—use improper temporal price deflators. When BRO adjust prices in urban/rural areas by region, they get a head-count rate of 78.4 percent (p. 36).

The World-Bank-definition 2011 PPP poverty lines for \$3.20/day, \$5.50/day, and \$21.70/day are multiples of the World-Bank-definition \$1.90/day line.

2.3.4 Percentile-based poverty lines

The scorecard for Madagascar also supports percentile-based poverty lines.²⁹ This facilitates a number of types of analyses. For example, the second-quintile (40th-percentile) line might be used to help track Madagascar's progress toward the World Bank's (2013) goal of "shared prosperity/inclusive economic growth", defined as income growth among the bottom 40 percent of the world's people.

The four quintile lines, analyzed together, can also be used to look at the relationship of consumption with health outcomes (or anything else related with the distribution of consumption). The scorecard thus offers an alternative for health-equity analyses that typically have used an asset index such as that supplied with the data from the Demographic and Health Surveys to compare an estimate of socio-economic status with health outcomes (Rutstein and Johnson, 2004).

poverty rate for that same line is not 20 percent but rather 14.6 percent.

²⁹ Like the asset index associated with the Demographic and Health Surveys, percentiles are defined in terms of people (not households) for Madagascar as a whole. For example, the all-Madagascar person-level poverty rate for the World-Bank-definition first-quintile (20th-percentile) poverty line is 20 percent (Table 3). The household-level

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

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

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

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

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

3. Scorecard construction

For Madagascar, about 90 candidate questions are initially prepared in the areas of:

- Household composition (such as the number of household members)
- Education (such as the literacy of the male head (or husband of the female head))
- Housing (such as the main material of the roof)
- Ownership of consumer durables (such as tables or beds)
- Employment (such as the number of household members who work)
- Agriculture (such as the number of household members who work in agriculture)
- Location of residence (such as region)
- Recent consumption (such as eating meat, fish, or eggs in the past 7 days)

One possible application of the scorecard is to estimate changes in poverty rates over time. Thus, when selecting questions—and holding other considerations constant—preference is given to questions whose responses are more sensitive to changes in poverty. For example, the number of tables owned is probably more likely to change in response to changes in socio-economic status than is the age of the male head (or husband of the female head.

The scorecard itself is built using 100% of the World-Bank-definition national poverty line and Logit regression on the construction sub-sample. Question selection is based on both judgment and statistics. The first step is to use Logit to build one scorecard for each candidate question. The power of each one-question scorecard to rank households by poverty status is assessed via the concentration index (Ravallion, 2009).

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

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

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

This algorithm is similar to common R²-based stepwise least-squares regression. It differs from naïve stepwise in that the selection of questions considers both statistical and non-statistical criteria. The use of non-statistical criteria can improve

31

³⁰ The statistical criterion for selecting a question is not the p values of its coefficients but rather the question's contribution to the ranking of households by poverty status in the context of a scorecard with ten other questions.

robustness through time and across non-nationally representative groups. It also helps to ensure that questions are straightforward, common-sense, inexpensive-to-collect, and acceptable to users.

The single scorecard here applies to all of Madagascar. Segmenting poverty-assessment tools by urban/rural does not improve targeting much. This is reported for nine countries in Sub-Saharan Africa (Brown, Ravallion, and van de Walle, 2018)³¹, Indonesia (World Bank, 2012), Bangladesh (Sharif, 2009), India and Mexico (Schreiner, 2006 and 2005a), Sri Lanka (Narayan and Yoshida, 2005), and Jamaica (Grosh and Baker, 1995). In general, segmenting poverty-assessment tools may improve the accuracy of estimates of poverty rates (Diamond *et al.*, 2016; Tarozzi and Deaton, 2009), but it may also increase the risk of overfitting (Haslett, 2012).

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³¹ Burkina Faso, Ethiopia, Ghana, Malawi, Mali, Niger, Nigeria, Tanzania, and Uganda. On average across these countries when targeting people in the lowest quintile or in the lowest two quintiles of scores and when 20 or 40 percent of people are poor, segmenting by urban/rural increases the number of poor people successfully targeted by about one per 200 or one per 400 poor people.

4. Practical guidelines for scorecard use

The main challenge of scorecard design is not to maximize statistical accuracy but rather to improve the chances that the scorecard is actually used and properly used (Schreiner, 2005b). When scorecard projects fail, the reason is not usually statistical inaccuracy but rather the failure of an organization to decide to do what is needed to integrate the scorecard in its processes and to train and convince its employees to use the scorecard properly (Schreiner, 2002). After all, most reasonable poverty-assessment tools have similar targeting accuracy, thanks to the empirical phenomenon known as the "flat maximum". The relevant bottleneck is less technical and more human, not statistics but organizational-change management. Accuracy is easier to achieve than adoption.

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

³² Dupriez, 2018; Caire and Schreiner, 2012; Hand, 2006; Lovie and Lovie, 1986; Kolesar and Showers, 1985; Stillwell, Barron, and Edwards, 1983; Dawes, 1979; Wainer, 1976; Myers and Forgy, 1963.

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

- Eleven questions
- Multiple-choice responses
- Simple points (non-negative integers, and no arithmetic beyond addition)

4.1 How to apply the scorecard in the field

The scorecard (and its "Back-page Worksheet") is ready to be photocopied. An enumerator applying Madagascar's scorecard would:

- Record the interview identifier, interview date, country code ("MDG"), scorecard code ("002") and the sampling weight assigned to the household of the participant by the program's survey design (if known)
- Record the names and identifiers of the participant (who is not necessarily the same as the respondent), of the field agent (if there is one) who is the participant's main point of contact with the program (and who is not necessarily the same as the enumerator), and of the program service point that is relevant for the participant (if there is such a service point)
- Mark the response to the first scorecard question ("In what region does the household live?") based on what is known about where the interviewed household lives
- Complete the "Back-page Worksheet" with each household member's first name (or nickname), marking the male head (or husband of the female head), if he exists
- Based on the "Back-page Worksheet", record the number of household members in the scorecard header next to "Number of household members:"
- Based on the "Back-page Worksheet", mark the response to the second scorecard question ("How many members does the household have?")
- Based on the "Back-page Worksheet", mark the response to the third scorecard question ("Do any household members have a disability?")
- Read the rest of the questions aloud one-by-one, marking the respondent's answers
- For all questions, write each point value in the far right-hand column, and circle the pre-printed response, the pre-printed points, and the hand-written points
- Add up the points to get a total score (if desired)
- Implement targeting policy (if any) based on the score
- Upload the data with a <u>mobile data-collection tool</u>, or deliver the paper scorecard to a central office for data entry, reporting, and analysis

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

If organizations or field workers gather their own data and if they believe that they have an incentive to exaggerate poverty rates (for example, if managers or funders reward them for higher poverty rates), then it is wise to do on-going quality control via data review and random audits (Matul and Kline, 2003). 33 IRIS Center (2007) and Toohig (2008) are useful nuts-and-bolts guides for logistics, budgeting, training field workers and supervisors, sampling, interviewing, piloting, recording data, and controlling quality. Schreiner (2014) explains how to compute estimates, report them, and analyze them.

While collecting scorecard questions is relatively easier than alternative ways of assessing poverty, it is still absolutely difficult. Training and explicit definitions of the terms and concepts in the scorecard are essential, and field workers should scrupulously study and follow the "Interview Guide" found after the "References" in this paper, as this "Interview Guide"—along with the "Back-page Worksheet"—is an integral part of the scorecard.³⁴

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³³ If a program does not want field workers or respondents to know the points associated with responses, then it can use a <u>mobile data-collection tool</u> or provide a version of the paper scorecard that does not display the points and then apply the points and compute scores later at a central office. Even if points are hidden, however, field workers and respondents can use common sense to guess how answers are linked with socio-economic status. 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.

³⁴ The guidelines here are the only ones that enumerators should receive. All other issues of interpretation should be left to the judgment of enumerators and respondents, as this seems to be what Madagascar's INSTAT did in the 2013 ENSOMD.

4.2 Survey-design choices

In terms of implementation and sampling design, a program must make choices about:

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

In general, the sampling design should follow from the program's goals for the survey, the business questions to be answered, and the budget. The broad goals are:

- To make sure that the sample is representative of a well-defined population
- To inform issues that matter to the program

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

- Employees of the program
- Third parties

There is only one correct, recommended way to do interviews: in-person, at the sampled household's residence, with an enumerator trained to follow the "Interview Guide". This is how INSTAT did interviews in Madagascar's 2013 ENSOMD, and this provides the most-accurate and most-consistent data (and thus the best estimates).

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

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

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

In some contexts—such as when a program's field agents do not already visit participants periodically at home anyway as part of their normal work—a program might judge that the lower costs of a non-recommended approach compensate for less-accurate estimates. The business wisdom of non-recommended methods depends on context-specific factors that each program must judge for itself. To judge carefully, a program that is considering a non-recommended method should do a small test to see how responses differ with the non-recommended method versus with a trained enumerator at the residence. Furthermore, any reporting should highlight the use of the non-recommended method and discuss its possible consequences.

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

- Paper in the field, and then filed at a central office
- Paper in the field, and then keyed into a database or spreadsheet at a central office
- Mobile devices in the field, and then uploaded to a database³⁵

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

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

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

39

³⁵ Scorocs can help set up a system to collect data with mobile devices or to capture data from paper forms in a database. Support is also available for calculating estimates as well as for reporting and analysis.

The frequency of application can be:

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

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

- With two independent samples of participants from the same population, with the first sample scored at baseline and the second sample scored at follow-up
- With a single sample of participants, all of whom are scored at both baseline and follow-up

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

5. Estimates of a household's poverty likelihood

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

To get absolute units, scores are converted to poverty likelihoods, that is, probabilities of being below a poverty line. This is done via easy-to-use look-up tables. For the example of 100% of the World-Bank-definition national poverty line, scores of 37–38 have a poverty likelihood of 92.3 percent, and scores of 39–40 have a poverty likelihood of 86.1 percent (Table 1).

The poverty likelihood associated with a score varies by poverty line. For example, scores of 37–38 are associated with a poverty likelihood of 92.3 percent for 100% of the World-Bank-definition national poverty line but of 95.5 percent for the World-Bank-definition \$1.90/day 2011 PPP line.

A given score is associated ("calibrated") with an estimated poverty likelihood that is defined as the share of households in the construction 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 poverty line and a score of 37–38 (table on next page), there are 4,801 (normalized) households in the construction sample. Of these, 4,433 (normalized) are below the poverty line. The estimated poverty likelihood associated with a score of 37–38 is then 92.3 percent, because $4,433 \div 4,801 = 0.923 = 92.3$ percent.

To illustrate with 100% of the World-Bank-definition national line and a score of 39–40, there are 5,067 (normalized) households in the construction sub-sample, of whom 4,365 (normalized) are below the line (see table below). The poverty likelihood for this score range is then $4,365 \div 5,067 = 0.861 = 86.1$ percent.

The same method is used to calibrate scores with estimated poverty likelihoods for all 38 poverty lines. 36

Even though the scorecard is constructed partly based on judgment related to non-statistical criteria, the calibration process produces poverty likelihoods that are objective, that is, derived from monetary poverty lines and from survey data on consumption. The calibrated poverty likelihoods would be objective even if the process of selecting questions and points did not use any data at all. In fact, objective scorecards of proven accuracy are often constructed using only expert judgment to

few households from linking higher scores with higher poverty likelihoods.

42

³⁶ To ensure that poverty likelihoods never increase as scores increase, likelihoods across pairs of adjacent scores may be iteratively averaged before grouping scores into ranges. This preserves unbiasedness while preventing sampling variation in score ranges with

Derivation of estimated poverty likelihoods (100% of the World-Bank-definition national line)

	Households in range and $<$		All households in		Poverty
Score	poverty line		\mathbf{range}		likelihood $(\%)$
0-22	5,348	÷	$5,\!360$	=	99.8
23 – 27	5,672	÷	5,738	=	98.9
28 - 29	3,063	÷	$3,\!166$	=	96.8
30 – 32	5,108	÷	$5,\!290$	=	96.6
33 - 34	3,801	÷	3,950	=	96.2
35 - 36	$4{,}135$	÷	4,473	=	92.5
37 - 38	4,433	÷	4,801	=	92.3
39 – 40	$4,\!365$	÷	5,067	=	86.1
41 – 42	4,098	÷	4,924	=	83.2
43 - 44	$3,\!648$	÷	4,646	=	78.5
45 - 46	$3{,}535$	÷	4,749	=	74.4
47 - 48	3,349	÷	4,848	=	69.1
49 – 50	2,409	÷	4,006	=	60.1
51 – 52	$2,\!688$	÷	4,804	=	55.9
53 – 54	2,011	÷	3,998	=	50.3
55 - 56	$1,\!273$	÷	$3,\!506$	=	36.3
57 - 59	$1,\!522$	÷	$5,\!290$	=	28.8
60 – 62	1,304	÷	5,065	=	25.7
63 – 65	614	÷	4,570	=	13.4
66 – 68	457	÷	4,114	=	11.1
69 - 73	407	÷	$5,\!336$	=	7.6
74–100	248	÷	5,056	=	4.9

Number of all households normalized to sum to 100,000.

select questions and points.³⁷ Of course, the scorecard here is constructed with both data and judgment. The fact that this paper acknowledges that some choices in scorecard construction—as in any statistical analysis—are informed by judgment in no way impugns the objectivity of the poverty likelihoods, as their objectivity depends on using data in score calibration, not on using data (and nothing else) in scorecard construction.

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 $^{^{\}scriptscriptstyle 37}$ Fuller, 2006; Caire, 2004; Schreiner et al., 2014.

Although the points in Madagascar's scorecard are transformed coefficients from a Logit regression, (untransformed) scores are not converted to poverty likelihoods via the Logit formula of $2.718281828^{\text{score}}$ x $(1 + 2.718281828^{\text{score}})^{-1}$. This is because the Logit formula is esoteric and difficult to compute by hand. It is more intuitive to define the poverty likelihood as the share of households with a given score in the construction 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.

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

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

To illustrate, suppose a program samples three households on 1 January 2021 and that they have scores of 20, 30, and 40, corresponding to estimated poverty likelihoods of 99.8, 96.6, and 86.1 percent (100% of the World-Bank-definition national line, Table 1). The population's estimated poverty rate is the households' average poverty likelihood of $(99.8 + 96.6 + 86.1) \div 3 = 94.2$ percent.³⁸

Be careful; the population's estimated poverty rate is *not* the poverty likelihood associated with the average score. Here, the average score is 30, which corresponds to an estimated poverty likelihood of 96.6 percent (Table 1). This differs from the 94.2 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, colors in the spectrum, or syllables in a solfège scale. Because scores are not cardinal numbers, they cannot meaningfully be added up or averaged across households. Only three operations are valid for scores: conversion to poverty likelihoods, analysis of distributions (Schreiner, 2012a), or comparison—if desired—with a cut-off for segmentation. There are a few contexts in which the analysis of scores is

Weights would differ by household if there were stratified sampling or—as discussed in

Section 2—if the analysis were at the level of the person or of the participant.

45

³⁸ This example assumes simple random sampling (or a census) and analysis at the level of households so that each household's household-level sampling weight is one (1).

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

Scores from the scorecard are calibrated with data from the construction sample of the 2013 ENSOMD for all 38 poverty lines. The process of calibrating scores to poverty likelihoods and the approach to estimating poverty rates is exactly the same for all poverty lines. For users, the only difference in terms of what they do with one poverty line versus with another has to do with the values in the look-up table used to convert scores to poverty likelihoods.

6.1 Accuracy of estimated poverty rates at a point in time

For the scorecard applied to 1,000 bootstraps of n = 16,384 for 100% of the World-Bank-definition national line, the average error (average difference between the estimate and observed value in the validation sample) for a poverty rate at a point in time is -1.2 percentage points (Table 2, which summarizes Table 5 across all poverty lines). For the 38 poverty lines, the maximum of the absolute values of the error in the validation sample is 1.5 percentage points, and the average of the absolute values of the average errors is about 0.3 percentage points. At least part of these differences is due to sampling variation in the division of the 2013 ENSOMD into two sub-samples.

When estimating poverty rates at a point in time for a given poverty line, the error reported in Table 2 should be subtracted from the average poverty likelihood to give a corrected estimate. For the example of the scorecard and 100% of the World-

Bank-definition national line in the validation sample, the error is -1.2 percentage points, so the corrected estimate in the three-household example above is 94.2 - (-1.2) = 95.4 percent.

In terms of precision, the 90-percent confidence interval for a population's estimated poverty rate at a point in time with n = 16,384 is ± 0.6 percentage points or smaller for all poverty lines (Table 2). Given the scorecard's standard assumptions, this means that in 900 of 1,000 bootstraps of this size, the estimate (after correcting for the known average error) is within 0.6 percentage points of the observed value.

For example, suppose that the (uncorrected) average poverty likelihood in a sample of n = 16,384 with the scorecard and 100% of the World-Bank-definition national line is 94.2 percent. Then estimates in 90 percent of such samples would be expected to fall in the range of 94.2 - (-1.2) - 0.5 = 94.9 percent to 94.2 - (-1.2) + 0.5 = 95.9 percent, with the most likely observed value being the corrected estimate in the middle of this range, that is, 94.2 - (-1.2) = 95.4 percent. This is because the original (uncorrected) estimate is 94.2 percent, the average error is -1.2 percentage points, and the 90-percent confidence interval for 100% of the World-Bank-definition national line in the validation sample with this sample size is ± 0.5 percentage points (Table 2).

6.2 Formula for standard errors for estimates of poverty rates

How precise are the point-in-time estimates? Because these estimates are averages, they have (in "large" samples) a Normal distribution and can be characterized by their error (average difference vis-à-vis observed values), together with their standard error (precision, taken as the square root of the sum of the squared differences).

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

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

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

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

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

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

N is the population size, and

n is the sample size.

For example, Madagascar's 2013 ENSOMD gives a direct-measure household-level poverty rate for 100% of the World-Bank-definition national line of $\hat{p}=61.9$ percent (Table 3).³⁹ If this measure came from a sample of n=16,384 households from a population N of 4,729,952 (the number of households in Madagascar in 2013 according to the ENSOMD sampling weights), then the finite-population correction ϕ is

$$\sqrt{\frac{4,729,952-16,384}{4,729,952-1}} = 0.9983$$
, which is very close to $\phi = 1$. If the desired confidence

level is 90-percent (z=1.64), then the confidence interval $\pm c$ is

$$\pm z \cdot \sqrt{\frac{\hat{p} \cdot (1 - \hat{p})}{n}} \cdot \sqrt{\frac{N - n}{N - 1}} = \pm 1.64 \cdot \sqrt{\frac{0.619 \cdot (1 - 0.619)}{16,384}} \cdot \sqrt{\frac{4,729,952 - 16,384}{4,729,952 - 1}} = \pm 0.621$$

percentage points. If ϕ were taken as 1, then the interval is ± 0.622 percentage points.

Unlike the 2013 ENSOMD, however, the scorecard does not measure poverty directly, so this formula is not applicable. To derive a formula for the scorecard, consider Table 5, which reports empirical confidence intervals $\pm c$ for the errors for the scorecard applied to 1,000 bootstrap samples of various sizes from the validation sample. For example, with $n=16{,}384$ and 100% of the World-Bank-definition national line, the 90-percent confidence interval is ± 0.493 percentage points.⁴⁰

Thus, the scorecard's 90-percent confidence interval with n=16,384 is ± 0.493 percentage points, while the interval for direct measurement is ± 0.621 percentage points. The ratio of the two intervals is $0.493 \div 0.621 = 0.79$.

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³⁹ This analysis ignores that poverty-rate estimates from the ENSOMD are themselves based on a sample and so have their own sampling distribution.

⁴⁰ Due to rounding, Table 5 displays 0.5, not 0.493.

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 validation sample is $\pm 1.64 \cdot \sqrt{\frac{0.619 \cdot (1-0.619)}{8,192}} \cdot \sqrt{\frac{4,729,952-8,192}{4,729,952-1}} = \pm 0.879$ percentage points. The empirical confidence interval with the scorecard (Table 5) is ± 0.725 percentage points. Thus for n=8,192, the ratio of the two intervals is $0.725 \div 0.879 = 0.82$.

This ratio of 0.82 for n=8,192 is close to the ratio of 0.79 for n=16,384. Across all sample sizes of 256 or more in Table 5, these ratios are generally close to each other, and their average turns out to be 0.81. This implies that confidence intervals for indirect estimates of poverty rates via Madagascar's scorecard with 100% of the World-Bank-definition national line are—for a given sample size—about 19 percent narrower than the confidence intervals for direct estimates via the 2013 ENSOMD. This 0.81 appears in Table 2 as the " α factor for precision" because if $\alpha=0.81$, then a formula for approximate confidence intervals $\pm c$ for the scorecard is $\pm c=\pm z\cdot\alpha\cdot\sigma$. That is, a formula for the approximate standard error σ for point-in-time estimates of poverty rates via the scorecard is $\alpha\cdot\sqrt{\frac{\hat{p}\cdot(1-\hat{p})}{n}}\cdot\sqrt{\frac{N-n}{N-1}}$.

In general, α can be greater than or less than 1.00. When α is smaller than 1.00, it means that the scorecard is has smaller standard errors than direct measurement. It turns out that α is less than 1.00 for 31 of the 38 poverty lines in Table 2. Its highest value is 1.07.

The formula relating confidence intervals with standard errors for the scorecard can be rearranged to give a formula for determining sample size before estimation. If \tilde{p} is the expected poverty rate before estimation, then the formula for sample size n from a population of size N that is based on the desired confidence level that corresponds to z and the desired confidence interval $\pm c$ is $n = N \cdot \left(\frac{z^2 \cdot \alpha^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p})}{z^2 \cdot \alpha^2 \cdot \widetilde{p} \cdot (1 - \widetilde{p}) + c^2 \cdot (N - 1)} \right)$. 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 the sample-size formula, suppose the population N is 4,729,952 (the number of households in Madagascar in 2013), suppose c = 0.04163, z =1.64 (90-percent confidence), and the relevant poverty line is 100% of the World-Bankdefinition national line so that the most sensible expected poverty rate \tilde{p} is Madagascar's overall poverty rate for that line in 2013 (61.9 percent at the household level, Table 3). The α factor is 0.81 (Table 2). Then the sample-size formula then gives

$$n = 4,729,952 \cdot \left(\frac{1.64^2 \cdot 0.81^2 \cdot 0.619 \cdot (1 - 0.619)}{1.64^2 \cdot 0.81^2 \cdot 0.619 \cdot (1 - 0.619) + 0.04163^2 \cdot (4,729,952 - 1)}\right) = 241, \text{ which is }$$

not far from the sample size of 256 observed for these parameters in Table 5 for 100% of the World-Bank-definition national line. Taking the finite-population correction factor ϕ as one (1) gives the same result, as $n = \left(\frac{0.81 \cdot 1.64}{0.04163}\right)^2 \cdot 0.619 \cdot (1 - 0.619) = 241$.

51

Of course, the α factors in Table 2 are specific to Madagascar, its poverty lines, its poverty rates, and this scorecard. The derivation of the formulas for approximate standard errors using the α factors, however, can be used for any poverty-assessment tool following the approach in this paper.

In practice after the end of fieldwork for the ENSOMD in January 2013, 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 households, each with one participant), 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 estimate such as the household-level poverty rate for 100% of the World-Bank-definition national line for Madagascar of 61.9 percent in the 2013 ENSOMD in Table 3, look up α (here, 0.81 in Table 2), assume that the scorecard will still work in the future and for sub-groups that are not nationally representative, ⁴¹ and then compute the required sample size. In this illustration, $n=10,000 \cdot \left(\frac{1.64^2 \cdot 0.81^2 \cdot 0.619 \cdot (1-0.619)}{1.64^2 \cdot 0.81^2 \cdot 0.619 \cdot (1-0.619)} + 0.02^2 \cdot (10,000-1)}\right) = 943.$

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⁴¹ This paper reports accuracy for the scorecard applied to its validation sample, but it does not test accuracy for later years nor for sub-populations that are not nationally representative. Performance after January 2013 will resemble that in the 2013 ENSOMD with deterioration over time and across non-nationally representative subgroups to the extent that the relationships between questions and poverty change.

7. Estimates of changes in poverty rates over time

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

Tests of the accuracy of estimates of change over time in which both baseline and follow-up estimates are from the new Madagascar scorecard are not done here.

Therefore, this paper can only suggest approximate formulas for standard errors.

Nonetheless, the relevant concepts are discussed because in practice pro-poor organizations in Madagascar can apply the new scorecard to measure change over time.

7.1 Warning: Change is not necessarily impact

The scorecard can estimate change. Of course, poverty could get better or worse, and the scorecard does not indicate what caused change. This point is often forgotten or confused, so it bears repeating: the scorecard merely estimates change, and it does not, in and of itself, indicate the causes of change. In particular, estimating the impact on poverty of participation in a pro-poor program requires knowledge or assumptions about what would have happened to participants if they had not been participants.

Making judgments or drawing conclusions about causality requires either strong assumptions or a control group that resembles participants in all ways except participation. To belabor the point, the scorecard can help estimate the impact of participation on poverty only if there is some way to know—or explicit assumptions

about—what would have happened in the absence of participation. And that must come from beyond the scorecard.

7.2 Estimating changes in poverty rates

Consider the illustration begun in the previous section. On 1 January 2021, a pro-poor program samples three households who score 20, 30, and 40 and so have poverty likelihoods of 99.8, 96.6, and 86.1 percent (100% of the World-Bank-definition national line, Table 1). Given the known average error for this line in the validation sample of -1.2 percentage points (Table 2), the corrected baseline estimated poverty rate is the households' average poverty likelihood of $[(99.8 + 96.6 + 86.1) \div 3] - (-1.2) = 95.4$ percent.

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

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

7.2.1 Estimating change with two independent samples

By way of illustration, suppose that three years later on 1 January 2024, the propor program draws a new, independent sample of three additional households from the same population as the three original households and finds that their scores are 25, 35, and 45 (poverty likelihoods of 98.9, 92.5, and 74.4 percent, 100% of the World-Bank-definition national line, Table 1). Adjusting for the known average error, the average poverty likelihood at follow-up is $[(98.9 + 92.5 + 74.4) \div 3] - (-1.2) = 89.8$ percent.

The three-year reduction in the poverty rate is then 95.4 - 89.8 = 5.6 percentage points. ⁴² If exactly three years passed between the average baseline interview and the average follow-up interview, then the estimated annual decrease in the poverty rate is about $5.6 \div 3 = 1.9$ percentage points per year. That is, about one in 53 participants in this hypothetical example rise above the poverty line each year. ⁴³ Among those who started below the line, about one in 50 (1.9 ÷ 95.4 = 2.0 percent) on net ended up above the line each year. ⁴⁴

7.2.2 Estimating change with one sample scored twice

Alternatively, suppose that the same three original households who were scored at baseline are scored again on 1 January 2024. Given scores of 25, 35, and 45, their follow-up poverty likelihoods are 98.9, 92.5, and 74.4 percent. The average across households of the difference in each given household's baseline poverty likelihood and its follow-up poverty likelihood is $[(99.8 - 98.9) + (96.6 - 92.5) + (86.1 - 74.4)] \div 3 = 5.6$ percentage points. ⁴⁵ If there are exactly three years between each household's interviews, then the estimated annual decrease in the poverty rate is (again) $5.6 \div 3 = 1.9$ percentage points per year.

⁴² Of course, such a large reduction in poverty in three years is unlikely, but this is just an example to show how the scorecard can be used to estimate change.

⁴³ This is a net figure; some start above the line and end below it, and vice versa.

⁴⁴ The scorecard does not reveal the reasons for this change.

 $^{^{45}}$ With one sample scored twice, the error for this line from Table 2 should not be subtracted off.

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

7.3 Precision for estimated changes

7.3.1 Precision when scoring two independent samples

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

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

Here, z, c, \hat{p} and N are defined as above, n is the sample size at both baseline and follow-up, ⁴⁶ and α is the average (across a range of bootstrapped sample sizes) of the ratio of the observed confidence interval from a scorecard divided by the theoretical confidence interval under direct measurement.

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⁴⁶ This means that—for a given level of precision—estimating the change in a poverty rate between two points in time requires four times as many interviews (not twice as many) as does estimating a poverty rate at a point in time.

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

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

With two independent samples, α has been estimated for scorecards for 19 countries (Schreiner 2018, 2017a, 2017b, 2017c, 2016a, 2016b, 2016c, 2016d, 2015b, 2015d, 2015e, 2015f, 2013a, 2013b, 2012c, 2010, 2009a, 2009b, and Chen and Schreiner, 2009). The unweighted average of α across the 27 scorecards for these 19 countries—after averaging α across poverty lines and pairs of survey rounds for each scorecard—is 1.10. ⁴⁷ This rough figure is as reasonable as any to use in Madagascar from now on when both baseline and follow-up are from the new scorecard.

To illustrate the use of this formula to determine sample size for estimating changes in poverty rates with two independent samples, suppose the desired confidence level is 90 percent (z=1.64), the desired confidence interval is ± 2 percentage points ($\pm c=\pm 0.02$), the poverty line is 100% of the World-Bank-definition national line, $\alpha=1.10$, $\tilde{p}=0.619$ (the household-level poverty rate in 2013 for 100% of the World-Bank-definition national line in Table 2), 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 (1).

57

⁴⁷ The average absolute error is 3.2 percentage points.

Then the baseline sample size is $n = 2 \cdot \left(\frac{1.10 \cdot 1.64}{0.02}\right)^2 \cdot 0.619 \cdot (1 - 0.619) \cdot 1 = 3,838$. The follow-up sample size is also 3,838.

7.3.2 Precision with one sample scored twice

Analogous to previous derivations, the general formula relating the confidence interval $\pm c$ to the standard error σ when using a scorecard to estimate change for one sample scored twice is:⁴⁸

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

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.

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

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

Because \tilde{p}_* could be anything between 0 and 0.5, more information is needed to apply this formula. The average observed relationship in Niger (Schreiner, 2018) and

 $^{^{\}rm 48}$ McNemar (1947) and Johnson (2007). John Pezzullo helped identify this formula.

Peru (Schreiner, 2009c) between \tilde{p}_* , the number of years y between baseline and follow-up, and $p_{\text{pre-baseline}} \cdot (1 - p_{\text{pre-baseline}})$ is close to:

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

Given this approximate result, a sample-size formula for a sample of households to whom the new scorecard for Madagascar is applied twice (once after January 2013 and then again later) is

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

The average α across poverty lines for Niger and Peru is about 1.14. This 1.14 figure for α is as reasonable as any other for the new Madagascar scorecard (as well as for other scorecards in general).

To illustrate the use of this formula, suppose that 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 2021 and then again in 2024 (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 (1). The pre-baseline household-level poverty rate p_{2021} is taken as 61.9 percent (Table 3), and α is assumed to be 1.14. Then the baseline sample size is $n = 2 \cdot \left(\frac{1.14 \cdot 1.64}{0.02}\right)^2 \cdot \{-0.01 + 0.016 \cdot 3 + [0.56 \cdot 0.619 \cdot (1-0.619)]\} \cdot 1 = 2,973$. The same group of 2,973 households is scored at follow-up as well.

8. Targeting

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

There is a distinction between targeting status (having a score at or below a targeting cut-off) and poverty status (having consumption below a poverty line).

Poverty status is a fact that is defined by whether consumption is below a poverty line as directly measured by a survey. In contrast, targeting status is a program's policy choice that depends on a cut-off and on an indirect estimate from a scorecard.

Households that score at or below a given cut-off should be labeled as targeted, ⁴⁹ not as poor. After all, unless all targeted households have poverty likelihoods of 100 percent, it is likely that some of them are non-poor (their consumption is above a given poverty line). In the context of the scorecard, the terms poor and non-poor have specific definitions. Using these same terms for targeting status is incorrect and misleading.

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⁴⁹ Other labels can be meaningful as long as they describe the segment and do not confuse targeting status (having a score below a program-selected cut-off) with poverty status (having consumption below an externally-defined poverty line). Examples include: Groups A, B, and C; Households with scores of 29 or less, 30 to 69, or 70 or more; and Households that qualify for reduced fees, or that do not qualify.

Possible targeting outcomes

	Targeting segment				
		$\underline{\mathrm{Targeted}}$	$\underline{\text{Non-targeted}}$		
Observed poverty status		<u>Inclusion</u>	$\underline{\textbf{Undercoverage}}$		
	Door	Poor	Poor		
	<u>Poor</u>	correctly	mistakenly		
		targeted	not targeted		
		$\underline{\text{Leakage}}$	<u>Exclusion</u>		
	Non-poor	Non-poor	Non-poor		
	HOH-DOOL	mistakenly	correctly		
		targeted	not targeted		

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

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

Programs should weigh these trade-offs when setting a cut-off. A formal way to do this is to assign net benefits—based on a program's values and mission—to each of the four possible targeting outcomes and then to choose the cut-off that maximizes the sum of net benefits.⁵⁰

Table 6 shows targeting outcomes by cut-off for households in Madagascar. For an example cut-off of 38 or less, outcomes for 100% of the World-Bank-definition national line in the validation sample are:

• Inclusion: 31.2 percent are below the line and correctly targeted

• Undercoverage: 30.9 percent are below the line and mistakenly not targeted

• Leakage: 1.5 percent are above the line and mistakenly targeted

• Exclusion: 36.4 percent are above the line and correctly not targeted

Increasing the cut-off to 40 or less improves inclusion and undercoverage but worsens leakage and exclusion:

• Inclusion: 35.5 percent are below the line and correctly targeted

• Undercoverage: 26.6 percent are below the line and mistakenly not targeted

• Leakage: 1.9 percent are above the line and mistakenly targeted

• Exclusion: 36.0 percent are above the line and correctly not targeted

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

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

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

- Assign benefits and costs to possible outcomes, based on its values and mission
- Tally total net benefits for each cut-off using Table 6 for a chosen poverty line
- Select the cut-off with the highest total net benefit

⁵⁰ Adams and Hand, 2000; Hoadley and Oliver, 1998.

62

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

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

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

Table 6 shows the hit rate for all cut-offs for the scorecard. For the example of 100% of the World-Bank-definition national line in the validation sample, total net benefit under the hit rate for a cut-off of 38 or less is 67.6 percent, with about two in three households in Madagascar correctly classified.

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

As an alternative to assigning benefits and costs to targeting outcomes and then choosing a cut-off to maximize total net benefits, a program could set a cut-off to achieve a desired poverty rate among targeted households. The third column of Table 7

("% targeted HHs who are poor") shows, for the scorecard applied to the validation sample, the estimated poverty rate among households who score at or below a given cut-off. For the example of 100% of the World-Bank-definition national line, targeting households who score 38 or less would target 32.7 percent of all households (second column) and would be associated with an estimated poverty rate among targeted households of 95.5 percent (third column).

Table 7 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 validation sample and a cut-off of 38 or less, 50.2 percent of all poor households are covered.

The final targeting measure in Table 7 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 validation sample and a cut-off of 38 or less, covering about 21.3 poor households means leaking to 1 non-poor household.

9. Summary

The scorecard helps pro-poor programs in Madagascar to get to know their participants better so as to prove and improve social performance.

The scorecard can segment clients for differentiated treatment as well as estimate:

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

Household-level estimates can be straightforwardly converted into the personlevel (head-count) estimates that are usually the most relevant.

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

The scorecard is constructed with data from about three-fifths of the households in Madagascar's 2013 ENSOMD. Those households' scores are then calibrated to poverty likelihoods for 38 poverty lines. The scorecard's accuracy (errors and standard errors) is tested out-of-sample on data that was not used to make the scorecard.

When the scorecard is applied to 38 poverty lines in the validation sample, the maximum of the absolute values of the average error for point-in-time estimates of poverty rates is 1.5 percentage points, and the average of the absolute values of the average error across the 38 lines is about 0.3 percentage points. Corrected estimates may be found by subtracting the known error for a given poverty line from original, uncorrected estimates.

For n=16,384 and 90-percent confidence, the confidence intervals for point-intime estimates of poverty rates are ± 0.6 percentage points or narrower. With n=1,024, the 90-percent confidence intervals are ± 2.3 percentage points or narrower.

If a program wants to use the scorecard for segmenting clients for differentiated treatment, then this paper provides useful information for selecting a targeting cut-off that fits the program's values and mission.

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

For this reason, the scorecard uses 11 questions that are straightforward, low-cost, and verifiable. Points are all zeros or positive integers, and scores range from 0 to 100. Scores are converted to poverty likelihoods via a look-up table, and targeting cut-offs are likewise straightforward to apply. The design attempts to facilitate voluntary adoption by helping program managers to understand and to trust the scorecard and by allowing non-specialists to add up scores quickly in the field.

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

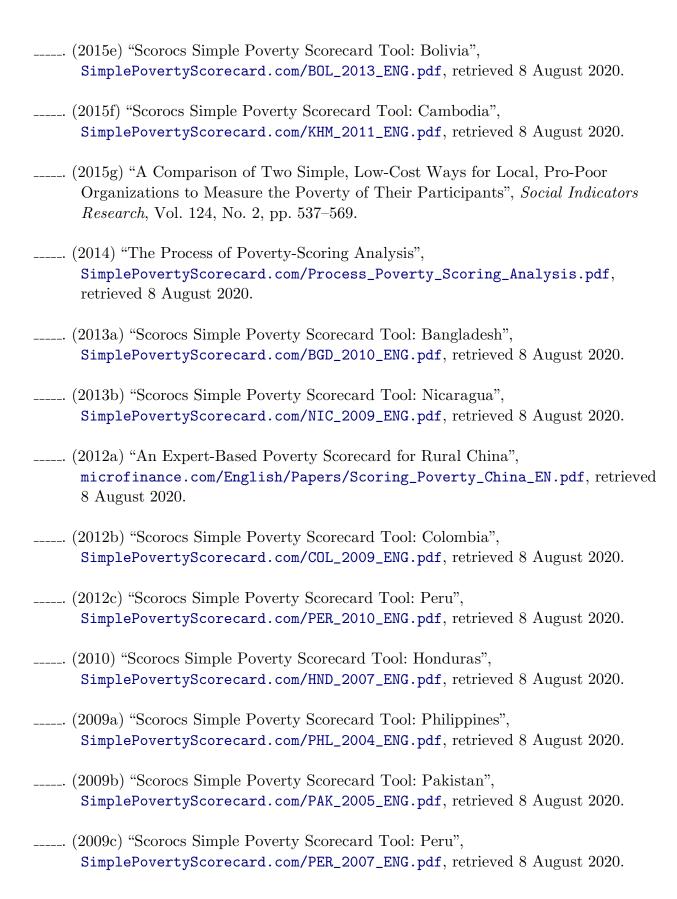
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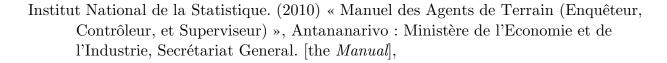
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Interview Guide

The excerpts quoted here are from:



- ____. (2012) « Questionnaire Ménage : Enquête Nationale sur le Suivi des Objectifs de Développement du Millénaire », catalog.ihsn.org/index.php/catalog/7351/download/86924, retrieved 8 August 2020. [the 2013 Questionnaire],
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Basic interview instructions

The scorecard can be filled out on paper in the field, with responses entered later in a spreadsheet or in your own database. Alternatively, Scorocs' cloud-based data-collection tool works in a web browser or as an Android phone app, allowing data entry in the field or in the office. If there is no connection, then data is stored locally until there is a connection. Download the data-collection tool, or ask about a private account.

The scorecard should be administered by an enumerator trained to follow this Guide.

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

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

Do not directly ask the first scorecard question ("In what region does the household live?"). Instead, fill in the answer based on your knowledge of the region where the household lives.

In the same way, do not directly ask the second scorecard question ("How many members does the household have?"). Instead, mark the response based on the number of household members that you listed on the "Back-page Worksheet".

Likewise, do not directly ask the third scorecard question ("Do any household members have a disability?") Instead, mark the response based on whether any household members were reported as having a disability when you compiled the "Back-page Worksheet".

Ask all of the remaining questions directly of the respondent.

General interviewing guidance

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

Remember that the respondent for the interview need not be the household member who is a participant with your program.

Likewise, the field agent to be recorded in the scorecard header is not necessarily the same as you the enumerator who does the interview. Rather, the field agent is the employee of the pro-poor program with whom the participant has an on-going relationship. If there is no such field agent, then leave those spaces in the scorecard header blank.

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

When you mark a response to a scorecard question, reduce data-entry error by writing the point value in the "Score" column and then circling the spelled-out response option, the pre-printed point value, and the hand-written points, like this:

4. Can the male head (or the husband of the female head)	A. No male head (nor husband of the female head)	0	
read a short text and write a short letter?	B. No	1	1
G 51101 V 100002 I	C. Yes	4	

When an issue comes up that is not addressed in this Guide, its resolution should be left to the unaided judgment of the enumerator and the respondent, as that apparently was the practice of Madagascar's INSTAT in the 2013 ENSOMD. That is, a program that uses the scorecard should not promulgate any definitions or rules (other than those in this Guide) to be used by all its enumerators. Anything not explicitly addressed in this Guide is to be left to the unaided judgment of each individual enumerator and the respondent.

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

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

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

In general, the application of the scorecard should mimic as closely as possible the application of the 2013 ENSOMD by Madagascar's INSTAT. For example, interviews should done in-person by a trained enumerator at the participant's residence because that is what INSTAT did in the 2013 ENSOMD.

Translation:

As of this writing, the scorecard itself, the "Back-page Worksheet", and this Guide are available only in English, French, and Malagasy. There are not yet official, professional translations to other languages or dialects spoken in Madagascar. Users should check scores.com to see what translations have been done since this writing.

If there is not yet an official, professional translation to a desired language, then please contact <u>Scorocs</u> for help in creating such a translation.

Who should be the respondent?

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

According to p. 9 and p. 28 of the *Manual*, "The ideal respondent is the head of the household. If the head is absent at the time of the interview, then another household member—designated by the other members who are present—can be the respondent. The respondent should always be someone who knows the required information. Other household members can help the respondent."

Who is the head of the household?

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

The *Manual* does not say how to determine who is the head of the interviewed household.

Guidelines for each question in the scorecard

- 1. In what region does the household live?
 - A. Vakinankaratra
 - B. Androy
 - C. Analanjirofo, Melaky, Sava, or Sofia
 - D. Analamanga, Anosy, Atsimo-Andrefana, Atsimo-Atsinanana, or Atsinanana
 - E. Alaotra-Mangoro, Amoron'i Mania, Betsiboka, Itasy, or Menabe
 - F. Bongolava, Ihorombe, Matsiatra Ambony, or Vatovavy Fitovinany
 - G. Boeny, or Diana

Unless you have to, do not directly ask this question of the respondent. Instead, fill in the answer based on your knowledge of the region where the household lives.

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

Do not directly ask this question of the respondent. Instead, mark the response based on the number of household members that you listed on the "Back-page Worksheet".

According to p. 3 of the 2013 Questionnaire, you should start your work [filling out the "Back-page Worksheet"] by reading the following to the respondent: "Please tell me the names of the people who normally live in your household, starting with the head of the household."

According to p. 4 of the 2010 Questionnaire, you the enumerator should define household for the respondent by reading the following:

"Household members are those who normally eat their meals together, who sleep under the same roof, and who recognize the authority of a single person who has the final word on important decisions. To qualify as a household member, a person must have lived at least six months with the household. Exceptions to this six-month rule include newly-weds, newborns, and the household head, who is a member even if he/she has been absent for more than six months. Members of the household may or may not be related to each other by blood or marriage. Someone who has lived elsewhere for more than six months is not a household member, even if he/she is a parent or a child of a household member."

According to pages 3–4 of the *Manual*, "A *household* is a group of persons—with or without a blood/marital relationship—who:

- Normally live together (usually eating the mid-day meal together and sleeping in the same compound), and
- Recognize the authority of a single person known as the head of the household

"Normally living together means usually eating and sleeping in the same accommodation or residence. This might be a detached house, an apartment, one or more rooms that together comprise a residence, or a set of rooms arranged around a courtyard. . . ."

"All people who meet the first two criteria for at least six months preceding the interview are to be counted as *members of the household*.

"That is, only people who fulfill all three criteria [normally eating together and sleeping in the same residence, recognizing the same household head, and doing these two things for at least six months before the interview] are counted as members of the household.

"There are some exceptions, and the following are counted as members of the interviewed household:

- The household head, even if he/she has been away for more than six months
- Newborns who are less than six-months-old
- Newly-weds who have joined/formed the household less than six months ago
- Any other person who—in spite of being away for more than six months—has not in that time been a member of some other household (for example, an apprentice, intern, seasonal migrant worker, soldier, prisoner, and so on.)

According to Faly Hery Rakotomanana, the National Director of Household Surveys at INSTAT, students who do not live, eat, and sleep with the household for more than six months because they are away at school are not to be counted as household members, even if they recognize the head of the household or are supported by the household financially.

- 3. Do any household members have a disability?
 - A. Yes
 - B. No

Do not directly ask this question of the respondent. Instead, mark the response based on the information about disability that you already collected as part of the "Back-page Worksheet".

- 4. Can the male head (or the husband of the female head) read a short text and write a short letter?
 - A. No male head (nor husband of the female head)
 - B. No
 - C. Yes

According to p. 16 of the *Manual*, "The male head (or the husband of the female head) is considered to be *literate*—that is, to be able to read—regardless of language, be it Malagasy or some other language."

"Carry with you a short, simple message to show—if you think it is called for—to the male head (or the husband of the female head) to verify his ability to read."

Remember that you already know the name of the male head (or the husband of the female head) and whether he exists from compiling the "Back-page Worksheet". Thus, if there is a male head (or a husband of the female head), do not mechanically ask, "Can the male head (or the husband of the female head) read a short text and write a short letter?" Instead, use the actual name of the male head (or the husband of the female head), for example: "Can Ibonia read a short text and write a short letter?" If there is no male head (nor husband of the female head), then do not ask the question of the respondent. Instead, mark "A. No male head (nor husband of the female head)" and go to the next question.

For the purposes of the scorecard, the male head (or the husband of the female head) is defined as:

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

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

According to Faly Hery Rakotomanana, you the enumerator are to ask whether the male head (or the husband of the female head) can read, and you should accept the respondent's response. If the respondent cannot respond with certainty, then you should show the male head (or the husband of the female head) a card upon which is written a simple subject-verb-object sentence in the respondent's preferred language. It is up you to come up with the simple subject-verb-object sentence, as INSTAT did not provide its enumerators with a standardized one.

- 5. What is the main material of the roof?
 - A. Sod, or no roof
 - B. Thatch, palm leaves, branches, reeds, bamboo, wood planks, or cardboard
 - C. Corrugated tin, tile, cement, shingles, wood, or zinc/fiberglass

- 6. What is the household's main cooking fuel?
 - A. Wood, straw, sticks, grass, crop residue, dung, does not cook, or not relevant
 - B. Charcoal, coal/lignite, electricity, LPG, natural gas, biogas, kerosene, or other

- 7. What type of toilet arrangement does the household use?
 - A. No toilet arrangement/bush
 - B. Latrine without a slab/open pit
 - C. Latrine with slab (washable or non-washable), composting latrine, self-aerating latrine, latrine over water, flush toilet (regardless of drainage), bucket/pan, or other

- 8. Does the household have a TV?
 - A. No
 - B. Yes

According to p. 33 of the *Manual*, "Only count televisions that are in good working order or that are only lightly damaged."

According to Faly Hery Rakotomanana:

- A TV that is repairable should be counted. A TV is considered to be repairable if the replacement parts required to put it in working order are available for sale in the marketplace
- A household is considered to have a TV if it owns a TV, even if the household does not currently have the TV in its possession. For example, if the TV has been lent or rented to someone else outside of the interviewed household, then it is still counted for the interviewed household as long as the interviewed household has the right to recall the TV from its current user
- A household is considered to have a TV even if the TV is used partly or completely in a business owned by the household

- 9. How many tables does the household have?
 - A. None
 - B. One
 - C. Two or more

According to p. 33 of the *Manual*, "Only count tables that are in good working order or that are only lightly damaged."

According to Faly Hery Rakotomanana:

- A table that is repairable should be counted. A table is considered to be repairable if
 the replacement parts required to put it in working order are available for sale in the
 marketplace
- A household is considered to have a table if it owns a table, even if the household does not currently have the table in its possession. For example, if the table has been lent or rented to someone else outside of the interviewed household, then it is still counted for the interviewed household as long as the interviewed household has the right to recall the table from its current user
- Any and all tables should be counted, including, for example, tables for specific purposes such as sewing-machine tables, computer tables, or low tables in the living room
- A household is considered to have a table even if the table is used partly or completely in a business owned by the household

- 10. How many beds does the household have?
 - A. None
 - B. One
 - C. Two
 - D. Three or more

According to p. 33 of the *Manual*, "Only count beds that are in good working order or that are only lightly damaged."

According to Faly Hery Rakotomanana:

- A bed that is repairable should be counted. A bed is considered to be repairable if the replacement parts required to put it in working order are available for sale in the marketplace
- A household is considered to have a bed if it owns a bed, even if the household does
 not currently have the bed in its possession. For example, if the bed has been lent or
 rented to someone else outside of the interviewed household, then it is still counted
 for the interviewed household as long as the interviewed household has the right to
 recall the bed from its current user
- A household is considered to have a bed even if the bed is used partly or completely in a business owned by the household

- 11. In the past 7 days, in how many days has the household eaten meat, fish, or eggs?
 - A. None
 - B. One
 - C. Two
 - D. Three or more

Table 3 (Madagascar): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 de	e <u>f.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	$_{ m 10th}$	20 th	$40 ext{th}$	50 th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		1,011	1,310	1,966	2,621	1,915	3,063	3,829	7,659	8,134	1,559	2,625	4,512	17,803	374	512	754	896	1,063	1,647
	Rate	Households	4,071	16.6	27.9	50.8	67.2	49.2	75.1	83.8	97.4	98.0	36.8	67.3	88.2	99.8	0.7	2.3	8.2	12.2	18.3	40.0
	Rate	People		22.7	35.5	59.2	74.8	57.7	81.3	88.4	98.3	98.6	44.9	74.9	91.6	99.9	1.0	3.7	12.2	17.3	24.8	48.3
Rural	Line	People		926	1,200	1,800	2,399	1,753	2,805	3,506	7,012	7,447	1,427	2,404	4,131	16,299	342	469	691	820	973	1,508
	Rate	Households	12,837	55.0	69.8	86.8	93.3	86.0	95.3	97.5	99.7	99.7	78.4	93.3	98.3	100.0	8.7	17.5	36.7	47.1	57.9	80.6
	Rate	People		64.5	77.9	91.0	95.5	90.4	97.0	98.6	99.8	99.8	84.8	95.6	99.0	100.0	11.8	23.3	45.7	56.7	67.2	86.5
<u>All</u>	Line	People		941	1,219	1,828	2,437	1,780	2,849	3,561	7,121	7,564	1,449	2,441	4,196	16,554	348	476	701	833	988	1,532
	Rate	Households	16,908	47.8	61.9	80.0	88.4	79.1	91.5	95.0	99.2	99.4	70.6	88.4	96.5	100.0	7.2	14.6	31.3	40.6	50.5	73.0
	Rate	People		57.4	70.7	85.6	92.0	84.9	94.4	96.8	99.5	99.6	78.0	92.0	97.8	100.0	10.0	20.0	40.0	50.0	60.0	80.0

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Madagascar): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a:	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)	<u> </u>
Region	Rate	People		Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
Urban	Line	People		1,063	1,398	2,097	2,796	1,967	3,147	3,934	7,867	8,356	1,601	2,697	4,635	18,288	404	538	800	940	1,117	1,737
	Rate	Households	4,071	30.2	43.6	66.0	79.0	62.6	83.3	89.4	98.0	98.2	50.8	77.6	92.7	99.7	3.0	7.0	17.0	24.2	32.4	55.4
	Rate	People		39.6	53.8	74.7	85.5	71.6	88.9	93.3	98.7	98.8	60.8	84.4	95.3	99.7	4.8	10.8	24.1	32.7	42.1	64.9
Rural	Line	People		930	1,223	1,834	2,445	1,720	2,752	3,440	6,879	7,306	1,400	2,358	4,053	15,991	354	471	699	822	977	1,519
	Rate	Households	12,837	52.5	67.5	84.1	91.4	82.2	93.2	96.4	99.4	99.5	73.9	90.6	97.6	99.9	8.2	16.5	35.4	45.2	55.5	77.5
	Rate	People		63.0	76.9	89.8	94.9	88.4	96.0	98.1	99.7	99.7	82.2	94.4	98.7	99.9	11.7	23.0	45.1	55.6	65.8	84.9
<u>All</u>	Line	People		962	1,266	1,898	2,531	1,780	2,849	3,561	7,121	7,564	1,449	2,441	4,196	16,554	366	487	724	851	1,011	1,572
	Rate	Households	16,908	46.6	61.2	79.4	88.1	77.1	90.6	94.5	99.0	99.2	67.9	87.2	96.3	99.8	6.8	14.0	30.6	39.7	49.4	71.7
	Rate	People		57.2	71.2	86.1	92.6	84.3	94.3	96.9	99.4	99.5	76.9	92.0	97.9	99.9	10.0	20.0	40.0	50.0	60.0	80.0

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Alaotra Mangoro): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	60th	80th
Urban	Line	People		937	1,214	1,820	2,427	1,773	2,837	3,546	7,093	7,533	1,444	2,431	4,179	16,487	346	474	699	830	984	1,525
	Rate	Households	135	22.1	46.8	75.9	87.1	75.0	90.1	94.8	99.1	99.1	61.4	87.1	96.5	100.0	0.0	0.6	8.5	16.3	25.2	64.5
	Rate	People		28.5	52.6	80.1	90.1	79.1	92.6	95.7	99.2	99.2	66.4	90.1	97.3	100.0	0.0	0.7	11.1	21.3	31.8	68.6
Rural	Line	People		789	1,022	1,533	2,044	1,493	2,390	2,987	5,974	6,345	1,216	2,048	3,520	13,886	292	399	588	699	829	1,285
	Rate	Households	555	29.8	54.6	85.3	97.9	83.4	99.2	99.8	100.0	100.0	69.9	97.9	100.0	100.0	0.3	2.0	12.1	20.2	34.8	72.7
	Rate	People		39.8	64.1	89.7	98.7	88.2	99.6	99.8	100.0	100.0	77.2	98.7	100.0	100.0	0.4	3.2	18.8	28.8	44.5	79.9
<u>All</u>	Line	People		806	1,044	1,565	2,087	1,525	2,440	3,050	6,099	6,478	1,241	2,091	3,593	14,178	298	408	601	714	846	1,312
	Rate	Households	690	29.0	53.8	84.4	96.8	82.6	98.3	99.3	99.9	99.9	69.0	96.8	99.6	100.0	0.2	1.9	11.7	19.8	33.9	71.9
	Rate	People		38.5	62.8	88.6	97.7	87.1	98.8	99.4	99.9	99.9	76.0	97.7	99.7	100.0	0.4	2.9	17.9	28.0	43.1	78.6

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Alaotra Mangoro): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Poverty	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People	·	928	1,220	1,830	2,440	1,716	2,746	3,433	6,866	7,292	1,397	2,353	4,045	15,959	353	470	698	820	975	1,516
	Rate	Households	135	29.9	55.2	77.2	86.9	73.6	90.2	93.4	99.6	99.6	63.7	85.8	94.5	100.0	0.7	2.4	13.4	21.8	32.7	68.8
	Rate	People		37.5	61.8	82.2	90.9	79.4	93.1	95.6	99.6	99.6	69.9	90.2	96.3	100.0	1.5	4.4	18.4	28.6	39.7	74.4
Rural	Line	People		715	941	1,411	1,881	1,323	2,117	2,646	5,293	5,621	1,077	1,814	3,118	12,303	272	362	538	632	752	1,169
	Rate	Households	555	28.8	49.6	70.0	83.3	65.5	86.5	92.3	98.0	98.4	56.7	81.3	94.2	99.8	0.2	2.9	11.2	18.8	33.5	60.6
	Rate	People		40.0	61.9	79.0	88.5	75.2	91.1	95.5	99.2	99.3	68.4	87.4	96.5	99.9	0.2	4.9	17.8	27.5	45.0	71.0
<u>All</u>	Line	People		782	1,028	1,542	2,056	1,446	2,313	2,892	5,783	6,142	1,177	1,982	3,407	13,444	297	396	588	691	821	1,277
	Rate	Households	690	29.1	51.3	72.2	84.4	67.9	87.6	92.6	98.5	98.8	58.8	82.6	94.3	99.9	0.4	2.7	11.9	19.7	33.2	63.1
	Rate	People		39.2	61.9	80.0	89.3	76.5	91.7	95.5	99.3	99.4	68.9	88.3	96.4	99.9	0.6	4.7	18.0	27.8	43.4	72.1

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Amoron'I Mania): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	60th	80th
Urban	Line	People		844	1,093	1,640	2,187	1,598	2,556	3,195	6,390	6,787	1,301	2,190	3,765	14,854	312	427	629	748	887	1,374
	Rate	Households	84	51.6	74.2	94.2	97.7	94.2	98.8	100.0	100.0	100.0	85.9	97.7	100.0	100.0	1.3	11.0	29.0	44.5	54.0	88.3
	Rate	People		59.3	80.9	97.7	99.5	97.7	99.8	100.0	100.0	100.0	90.6	99.5	100.0	100.0	1.5	14.7	37.0	52.3	62.5	93.4
Rural	Line	People		866	1,121	1,682	2,243	1,639	2,622	3,277	6,554	6,961	1,334	2,247	3,861	15,235	320	438	646	767	909	1,410
	Rate	Households	634	54.5	73.4	92.9	96.5	91.9	97.4	98.6	100.0	100.0	85.7	96.5	99.0	100.0	6.1	10.5	29.5	42.7	57.7	88.0
	Rate	People		63.4	81.7	95.7	98.0	95.0	98.5	99.2	100.0	100.0	91.2	98.0	99.3	100.0	7.6	13.3	36.1	50.5	66.7	92.6
<u>All</u>	Line	People		864	1,120	1,680	2,240	1,636	2,618	3,273	6,545	6,952	1,332	2,244	3,856	15,215	320	437	645	766	908	1,408
	Rate	Households	718	54.3	73.5	93.0	96.5	92.0	97.5	98.7	100.0	100.0	85.7	96.5	99.1	100.0	5.8	10.6	29.4	42.8	57.5	88.0
	Rate	People		63.1	81.7	95.8	98.1	95.2	98.5	99.2	100.0	100.0	91.2	98.1	99.4	100.0	7.3	13.3	36.1	50.6	66.4	92.6

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Amoron'I Mania): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	e-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
$\underline{\mathbf{Urban}}$	Line	People	·	907	1,192	1,788	2,384	1,677	2,683	3,354	6,708	7,125	1,365	2,299	3,952	15,593	345	459	682	801	952	1,481
	Rate	Households	84	44.6	74.0	91.4	94.9	89.9	96.3	100.0	100.0	100.0	82.0	94.6	100.0	100.0	1.3	8.7	22.7	36.2	48.7	86.8
	Rate	People		55.3	85.1	96.9	98.5	96.0	99.2	100.0	100.0	100.0	90.5	98.4	100.0	100.0	1.3	13.0	30.6	45.4	60.4	94.1
Rural	Line	People		850	1,118	1,677	2,236	1,573	2,517	3,146	6,292	6,682	1,281	2,157	3,707	14,625	323	430	640	752	893	1,389
	Rate	Households	634	52.4	79.8	93.7	98.4	92.4	98.5	99.1	100.0	100.0	84.6	98.3	99.8	100.0	6.0	10.1	27.8	42.8	58.8	89.1
	Rate	People		60.5	86.1	96.1	99.2	95.4	99.3	99.6	100.0	100.0	90.1	99.2	99.9	100.0	7.4	12.8	34.3	50.3	67.9	92.9
<u>A11</u>	Line	People		860	1,131	1,697	2,262	1,591	2,546	3,182	6,364	6,759	1,295	2,181	3,749	14,793	327	435	647	760	904	1,405
	Rate	Households	718	51.0	78.7	93.3	97.8	91.9	98.1	99.3	100.0	100.0	84.2	97.6	99.8	100.0	5.1	9.9	26.9	41.6	57.0	88.6
	Rate	People		59.6	85.9	96.3	99.1	95.5	99.3	99.7	100.0	100.0	90.2	99.1	99.9	100.0	6.4	12.8	33.7	49.4	66.6	93.1

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Analamanga): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	$_{ m 10th}$	20 th	$40 ext{th}$	50th	60th	80th
Urban	Line	People		1,109	1,437	2,155	2,874	2,099	3,359	4,199	8,397	8,919	1,709	2,879	4,947	19,520	410	561	827	983	1,165	1,806
	Rate	Households	1,332	8.2	17.0	42.0	61.6	40.7	69.9	79.6	97.0	97.5	26.3	61.8	85.3	99.8	0.0	0.6	3.3	4.9	9.2	30.2
	Rate	People		11.3	22.4	49.4	68.6	47.9	76.0	84.2	97.8	98.2	32.2	68.8	88.6	99.9	0.0	1.2	5.0	7.4	12.8	36.6
Rural	Line	People		1,030	1,334	2,001	2,669	1,950	3,119	3,899	7,798	8,282	1,587	2,673	4,594	18,127	381	521	768	912	1,082	1,677
	Rate	Households	693	33.3	46.6	66.0	77.6	65.0	83.7	90.0	98.7	98.9	55.3	77.6	93.5	100.0	2.1	6.0	20.2	28.6	35.6	58.0
	Rate	People		40.1	53.4	71.8	81.9	70.9	87.5	93.2	99.2	99.3	61.9	81.9	95.5	100.0	3.0	7.7	26.0	34.9	42.0	64.5
<u>All</u>	Line	People		1,060	1,374	2,060	2,747	2,007	3,211	4,014	8,028	8,526	1,634	2,752	4,730	18,661	392	536	791	939	1,114	1,727
	Rate	Households	2,025	23.2	34.7	56.4	71.2	55.3	78.2	85.9	98.0	98.3	43.7	71.3	90.2	99.9	1.3	3.8	13.4	19.1	25.0	46.9
	Rate	People		29.1	41.5	63.2	76.8	62.1	83.1	89.8	98.6	98.9	50.5	76.9	92.8	100.0	1.8	5.2	17.9	24.4	30.8	53.8

Poverty rates are percentages. $\,$

All poverty lines are MGA per-person per-day.

Table 3 (Analamanga): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		1,239	1,629	2,444	3,259	2,292	3,667	4,584	9,168	9,737	1,866	3,143	5,401	21,311	471	627	932	1,095	1,302	2,024
	Rate	Households	1,332	12.6	23.3	53.0	71.0	48.7	76.4	84.4	97.1	97.5	32.6	69.2	89.1	99.4	0.2	0.7	4.0	7.5	13.5	38.1
	Rate	People		17.1	30.3	61.2	77.8	57.1	82.4	88.8	97.6	97.9	40.1	76.1	92.1	99.5	0.2	1.5	6.1	10.7	18.2	45.9
Rural	Line	People		1,088	1,430	2,145	2,861	2,012	3,219	4,024	8,048	8,548	1,638	2,759	4,742	18,708	414	550	818	961	1,143	1,777
	Rate	Households	693	35.3	50.4	68.5	80.8	66.9	83.5	91.8	99.3	99.4	57.0	79.7	94.4	99.9	2.4	5.9	21.6	31.0	38.1	61.0
	Rate	People		43.1	57.4	74.2	85.1	72.7	87.5	94.7	99.6	99.7	64.1	84.3	96.5	100.0	3.6	8.3	28.4	38.3	45.5	67.7
<u>All</u>	Line	People		1,147	1,508	2,262	3,015	2,121	3,393	4,242	8,484	9,010	1,727	2,908	4,998	19,721	436	580	863	1,013	1,205	1,873
	Rate	Households	2,025	26.1	39.4	62.2	76.8	59.6	80.6	88.8	98.4	98.7	47.1	75.5	92.3	99.7	1.5	3.8	14.5	21.4	28.1	51.7
	Rate	People		33.0	46.8	69.1	82.3	66.6	85.5	92.4	98.8	99.0	54.8	81.1	94.8	99.8	2.3	5.6	19.7	27.6	34.9	59.2

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Analanjirofo): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 de	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	40 th	50th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People	·	908	1,176	1,764	2,352	1,718	2,749	3,436	6,872	7,298	1,399	2,356	4,049	15,974	336	459	677	804	953	1,478
	Rate	Households	119	8.8	23.3	54.5	83.2	52.0	88.4	92.7	99.4	100.0	35.9	83.2	97.1	100.0	0.0	0.0	1.9	5.8	10.8	40.1
	Rate	People		14.4	31.0	62.1	87.5	60.6	91.4	93.8	99.7	100.0	45.3	87.5	98.0	100.0	0.0	0.0	3.7	8.9	17.4	49.2
Rural	Line	People		957	1,240	1,860	2,479	1,811	2,898	3,623	7,245	7,695	1,475	2,484	4,269	16,842	354	484	714	848	1,005	1,558
	Rate	Households	606	52.8	72.9	95.3	99.4	94.3	99.7	99.9	100.0	100.0	85.2	99.4	100.0	100.0	5.6	11.6	30.4	41.3	57.1	88.2
	Rate	People		65.9	82.5	97.7	99.6	97.2	99.8	99.9	100.0	100.0	92.4	99.6	100.0	100.0	8.8	17.4	41.5	53.3	70.0	94.0
<u>All</u>	Line	People		952	1,233	1,849	2,466	1,801	2,882	3,603	7,206	7,653	1,467	2,470	4,245	16,750	352	481	710	843	1,000	1,550
	Rate	Households	725	47.8	67.2	90.6	97.6	89.5	98.4	99.0	99.9	100.0	79.6	97.6	99.7	100.0	5.0	10.3	27.1	37.3	51.8	82.7
	Rate	People		60.5	77.1	93.9	98.4	93.3	98.9	99.2	100.0	100.0	87.4	98.4	99.8	100.0	7.9	15.5	37.5	48.6	64.5	89.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Analanjirofo): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
Urban	Line	People		905	1,190	1,785	2,379	1,674	2,678	3,347	6,694	7,110	1,363	2,295	3,944	15,561	344	458	681	800	951	1,478
	Rate	Households	119	20.7	32.3	63.8	81.7	59.3	87.2	90.6	96.5	96.5	44.0	80.2	93.6	99.4	0.6	0.6	9.0	14.7	22.5	50.0
	Rate	People		29.6	43.0	72.9	87.7	68.6	90.2	92.5	97.4	97.4	56.2	87.0	95.5	99.5	0.7	0.7	14.3	21.3	31.9	60.7
Rural	Line	People		814	1,071	1,606	2,142	1,506	2,410	3,013	6,026	6,400	1,226	2,066	3,550	14,008	310	412	613	720	856	1,330
	Rate	Households	606	36.2	55.5	75.8	87.8	72.7	91.4	94.6	99.4	99.4	62.8	87.0	96.4	99.4	4.1	9.1	19.8	26.6	39.7	67.5
	Rate	People		48.2	69.3	84.8	93.8	82.9	96.0	97.5	99.6	99.6	75.0	93.1	98.4	99.6	7.0	13.7	28.6	37.0	52.6	78.4
<u>All</u>	Line	People		834	1,097	1,645	2,193	1,543	2,468	3,085	6,171	6,554	1,256	2,115	3,635	14,344	317	422	627	737	876	1,362
	Rate	Households	725	32.5	50.1	73.0	86.3	69.5	90.4	93.6	98.7	98.7	58.4	85.4	95.7	99.4	3.3	7.1	17.2	23.8	35.6	63.4
	Rate	People		44.2	63.7	82.2	92.5	79.8	94.7	96.4	99.1	99.1	70.9	91.8	97.8	99.5	5.6	10.9	25.5	33.6	48.2	74.6

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Androy): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013	def.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	40 th	50th	60th	80th
<u>Urban</u>	Line	People		_	_	_	_	_	_	_	_	0	_	_	_	_	_	_	_	_	_	
	Rate	Households	116	_	_	_	_	_			_	0.0	_		_		_	_	_	_	_	_
	Rate	People		_	_	_			_	_	_	0.0		_	_					_	_	
Rural	Line	People		893	1,158	1,736	2,315	1,691	2,706	3,382	6,765	7,185	1,377	2,319	3,986	15,726	330	452	666	792	939	1,455
	Rate	Households	590	87.3	93.9	97.0	98.7	96.8	99.4	99.6	100.0	100.0	95.6	98.7	99.8	100.0	37.7	55.8	77.0	84.1	88.3	96.4
	Rate	People		92.1	96.8	98.3	99.1	98.2	99.7	99.9	100.0	100.0	97.6	99.1	100.0	100.0	46.3	65.3	84.1	89.4	92.8	98.0
<u>All</u>	Line	People		893	1,158	1,736	2,315	1,691	2,706	3,382	6,765	7,185	1,377	2,319	3,986	15,726	330	452	666	792	939	1,455
	Rate	Households	706	87.3	93.9	97.0	98.7	96.8	99.4	99.6	100.0	100.0	95.6	98.7	99.8	100.0	37.7	55.8	77.0	84.1	88.3	96.4
	Rate	People		92.1	96.8	98.3	99.1	98.2	99.7	99.9	100.0	100.0	97.6	99.1	100.0	100.0	46.3	65.3	84.1	89.4	92.8	98.0

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Androy): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
Urban	Line	People		930	1,224	1,835	2,447	1,721	2,754	3,442	6,884	7,312	1,401	2,360	4,056	16,003	354	471	700	822	978	1,520
	Rate	Households	116	94.3	96.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7	100.0	100.0	100.0	49.9	66.7	82.8	90.2	94.3	97.7
	Rate	People		96.2	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.0	100.0	100.0	100.0	61.6	75.5	88.4	92.3	96.2	99.0
Rural	Line	People		908	1,194	1,791	2,387	1,679	2,687	3,358	6,717	7,134	1,367	2,302	3,957	15,613	345	459	683	802	954	1,483
	Rate	Households	590	86.0	91.6	96.3	98.3	96.2	98.6	99.6	100.0	100.0	94.2	98.3	99.6	100.0	35.5	52.0	76.6	83.1	87.1	94.9
	Rate	People		91.9	96.1	98.1	99.1	98.1	99.2	99.9	100.0	100.0	96.9	99.1	99.9	100.0	45.2	62.8	85.1	90.0	92.7	97.4
<u>All</u>	Line	People		911	1,198	1,797	2,396	1,685	2,697	3,371	6,742	7,160	1,372	2,311	3,972	15,672	346	461	685	805	957	1,488
	Rate	Households	706	87.2	92.4	96.9	98.5	96.7	98.8	99.7	100.0	100.0	94.7	98.5	99.7	100.0	37.5	54.1	77.4	84.1	88.1	95.3
	Rate	People		92.6	96.5	98.4	99.2	98.4	99.3	99.9	100.0	100.0	97.2	99.2	99.9	100.0	47.6	64.7	85.6	90.3	93.2	97.6

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Anosy): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 ext{th}$	80th
<u>Urban</u>	Line	People		950	1,231	1,847	2,462	1,799	2,878	3,598	7,196	7,643	1,465	2,467	4,240	16,727	351	481	709	842	998	1,548
	Rate	Households	138	40.9	57.3	73.0	84.5	71.2	87.6	94.4	99.5	99.5	63.2	84.5	94.9	100.0	1.5	6.9	22.2	33.7	44.3	66.3
	Rate	People		53.8	69.1	81.2	90.2	80.3	92.4	96.9	99.9	99.9	75.0	90.2	97.0	100.0	1.7	10.1	30.5	45.4	57.3	76.9
Rural	Line	People		869	1,126	1,689	2,252	1,645	2,633	3,291	6,582	6,990	1,340	2,256	3,878	15,299	321	440	648	770	913	1,415
	Rate	Households	598	67.6	81.4	93.7	98.0	93.0	98.9	99.7	100.0	100.0	87.9	98.0	99.8	100.0	19.2	29.9	50.7	60.7	69.9	88.8
	Rate	People		77.2	88.7	96.8	99.0	96.5	99.4	99.8	100.0	100.0	93.8	99.0	99.9	100.0	26.4	38.7	62.5	71.8	79.3	94.4
<u>All</u>	Line	People		882	1,142	1,713	2,284	1,669	2,670	3,338	6,676	7,090	1,359	2,288	3,933	15,518	326	446	658	781	926	1,436
	Rate	Households	736	62.9	77.1	90.0	95.6	89.1	96.9	98.7	99.9	99.9	83.5	95.6	98.9	100.0	16.0	25.8	45.6	55.9	65.3	84.8
	Rate	People		73.6	85.7	94.4	97.6	94.0	98.3	99.3	100.0	100.0	90.9	97.6	99.5	100.0	22.6	34.3	57.6	67.8	76.0	91.7

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Anosy): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Na	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 ext{th}$	50th	$60 ext{th}$	80th
<u>Urban</u>	Line	People		1,071	1,408	2,112	2,817	1,981	3,170	3,962	7,924	8,416	1,613	2,716	4,669	18,420	407	542	806	947	1,125	1,749
	Rate	Households	138	38.4	53.8	76.5	87.4	73.7	87.9	95.1	98.4	98.4	61.3	87.4	96.2	100.0	2.9	7.7	19.1	31.6	39.8	68.0
	Rate	People		51.3	65.5	84.9	93.2	82.9	93.7	97.6	99.6	99.6	72.6	93.2	98.1	100.0	4.6	12.1	27.5	43.8	52.9	78.0
Rural	Line	People		873	1,148	1,722	2,297	1,615	2,584	3,231	6,461	6,862	1,315	2,215	3,807	15,019	332	442	657	772	917	1,427
	Rate	Households	598	67.3	79.5	93.9	97.2	92.3	98.9	99.7	100.0	100.0	85.5	96.9	99.8	100.0	18.7	30.3	51.4	60.4	69.4	88.2
	Rate	People		78.0	88.7	97.3	99.0	96.5	99.5	99.9	100.0	100.0	92.8	98.8	99.9	100.0	27.2	41.8	65.3	72.7	79.8	94.3
<u>All</u>	Line	People		905	1,190	1,785	2,380	1,674	2,678	3,348	6,696	7,112	1,363	2,295	3,945	15,565	344	458	681	800	951	1,478
	Rate	Households	736	62.0	74.8	90.7	95.4	88.8	96.9	98.8	99.7	99.7	81.1	95.1	99.1	100.0	15.8	26.1	45.4	55.1	63.9	84.5
	Rate	People		73.7	85.0	95.3	98.0	94.3	98.6	99.5	99.9	99.9	89.6	97.9	99.6	100.0	23.6	37.0	59.2	68.0	75.5	91.7

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Atsimo Andrefana): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP	2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percentil	le-based	lines (2	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	40 th	50th	60th	80 th
Urban	Line	People		876	1,135	1,702	2,270	1,658	2,653	3,316	6,632	7,044	1,350	2,273	3,907	15,416	324	443	653	776	920	1,426
	Rate	Households	161	9.0	14.4	31.0	46.8	31.0	51.9	72.0	94.6	96.3	18.5	46.8	78.5	98.2	0.9	1.6	4.7	7.3	10.0	21.1
	Rate	People		13.7	20.0	39.2	56.3	39.2	61.3	82.1	97.2	97.8	24.5	56.3	86.5	98.9	1.6	2.5	8.6	12.2	15.0	27.4
Rural	Line	People		1,097	1,421	2,131	2,842	2,076	3,322	4,152	8,305	8,820	1,690	2,847	4,893	19,305	406	555	818	972	1,152	1,786
	Rate	Households	545	73.6	82.4	95.5	98.5	95.1	99.0	100.0	100.0	100.0	88.8	98.5	100.0	100.0	23.0	35.2	55.5	64.3	76.5	90.9
	Rate	People		82.2	89.2	97.9	99.4	97.8	99.7	100.0	100.0	100.0	93.4	99.4	100.0	100.0	27.2	41.5	63.1	72.0	84.2	94.6
<u>All</u>	Line	People		1,067	1,382	2,073	2,764	2,019	3,230	4,038	8,076	8,578	1,644	2,768	4,758	18,773	394	540	796	945	1,120	1,737
	Rate	Households	706	64.8	73.2	86.7	91.5	86.4	92.6	96.2	99.3	99.5	79.3	91.5	97.1	99.8	20.0	30.7	48.7	56.6	67.5	81.4
	Rate	People		72.8	79.7	89.9	93.5	89.8	94.5	97.5	99.6	99.7	84.0	93.5	98.2	99.9	23.7	36.2	55.7	63.8	74.8	85.4

Poverty rates are percentages. $\,$

All poverty lines are MGA per-person per-day.

Table 3 (Atsimo Andrefana): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
Urban	Line	People		1,027	1,351	2,026	2,701	1,900	3,040	3,799	7,599	8,071	1,547	2,605	4,477	17,664	391	520	773	908	1,079	1,678
	Rate	Households	161	30.5	36.9	52.7	64.1	51.2	69.3	81.7	95.1	95.4	40.0	61.0	85.1	100.0	7.8	13.8	23.2	28.9	31.5	44.6
	Rate	People		36.5	42.7	58.3	70.5	56.4	78.3	88.5	98.0	98.1	45.0	67.1	91.2	100.0	9.5	17.9	28.8	35.0	37.2	49.1
Rural	Line	People		1,136	1,493	2,240	2,987	2,101	3,361	4,202	8,403	8,925	1,710	2,881	4,951	19,534	432	575	854	1,004	1,193	1,855
	Rate	Households	545	68.6	76.8	92.5	97.3	92.3	98.1	99.9	100.0	100.0	84.8	96.6	100.0	100.0	17.8	30.7	51.9	60.9	69.9	88.7
	Rate	People		80.5	86.9	97.2	99.1	97.2	99.6	100.0	100.0	100.0	92.9	98.8	100.0	100.0	23.9	41.0	63.3	72.6	81.2	95.2
<u>All</u>	Line	People		1,115	1,466	2,199	2,932	2,063	3,300	4,125	8,250	8,762	1,679	2,828	4,861	19,178	424	564	839	986	1,171	1,821
	Rate	Households	706	61.4	69.3	85.0	91.0	84.5	92.7	96.4	99.1	99.1	76.3	89.9	97.2	100.0	15.9	27.5	46.5	54.9	62.7	80.3
	Rate	People		72.1	78.5	89.8	93.7	89.4	95.5	97.8	99.6	99.6	83.8	92.8	98.3	100.0	21.1	36.6	56.8	65.4	72.8	86.4

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Atsimo Atsinanana): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u>, </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	60th	80th
Urban	Line	People		777	1,006	1,510	2,013	1,471	2,353	2,941	5,882	6,248	1,197	2,016	3,466	13,674	287	393	579	688	816	1,265
	Rate	Households	112	62.1	74.9	87.4	94.2	84.9	98.0	100.0	100.0	100.0	79.9	94.2	100.0	100.0	7.4	18.5	41.0	57.1	63.6	81.5
	Rate	People		75.0	85.8	94.2	96.6	92.3	98.4	100.0	100.0	100.0	89.6	96.6	100.0	100.0	9.3	25.5	53.4	70.2	76.3	91.1
Rural	Line	People		933	1,209	1,814	2,419	1,767	2,827	3,534	7,068	7,507	1,439	2,423	4,164	16,430	345	472	696	827	981	1,520
	Rate	Households	605	84.2	89.8	96.5	98.5	96.4	98.9	100.0	100.0	100.0	93.4	98.5	100.0	100.0	26.9	50.7	70.8	78.4	84.5	94.8
	Rate	People		89.8	94.1	98.2	99.3	98.2	99.4	100.0	100.0	100.0	96.4	99.3	100.0	100.0	33.3	59.0	78.7	84.7	90.0	97.5
<u>All</u>	Line	People		923	1,196	1,794	2,393	1,748	2,797	3,496	6,992	7,426	1,423	2,397	4,119	16,253	341	467	689	818	970	1,504
	Rate	Households	717	82.8	88.9	95.9	98.2	95.6	98.8	100.0	100.0	100.0	92.5	98.2	100.0	100.0	25.6	48.6	68.8	77.0	83.2	93.9
	Rate	People		88.8	93.6	98.0	99.1	97.8	99.4	100.0	100.0	100.0	95.9	99.1	100.0	100.0	31.7	56.9	77.0	83.8	89.2	97.0

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Atsimo Atsinanana): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		858	1,129	1,693	2,258	1,588	2,541	3,176	6,351	6,746	1,293	2,177	3,742	14,764	326	434	646	759	902	1,402
	Rate	Households	112	66.9	79.4	90.4	95.0	88.6	96.3	99.5	100.0	100.0	85.9	95.0	99.5	100.0	9.4	26.3	49.4	62.9	68.8	85.9
	Rate	People		78.7	89.7	96.2	98.3	95.5	98.8	99.5	100.0	100.0	93.8	98.3	99.5	100.0	13.2	35.6	62.9	74.8	80.1	93.8
Rural	Line	People		922	1,213	1,819	2,425	1,706	2,729	3,412	6,824	7,247	1,389	2,339	4,020	15,862	351	467	694	815	969	1,507
	Rate	Households	605	82.9	88.5	96.3	97.6	95.6	98.1	98.9	100.0	100.0	91.7	97.6	99.5	100.0	26.3	50.2	70.1	78.1	84.3	93.3
	Rate	People		89.7	93.4	98.4	99.1	98.0	99.2	99.7	100.0	100.0	95.4	99.1	99.9	100.0	32.6	59.2	78.7	85.4	90.7	96.7
<u>All</u>	Line	People		912	1,199	1,798	2,398	1,686	2,698	3,373	6,746	7,165	1,373	2,312	3,974	15,681	347	461	686	806	958	1,489
	Rate	Households	717	80.4	87.1	95.4	97.2	94.5	97.8	99.0	100.0	100.0	90.8	97.2	99.5	100.0	23.6	46.4	66.7	75.7	81.8	92.1
	Rate	People		87.9	92.8	98.0	99.0	97.6	99.1	99.7	100.0	100.0	95.1	99.0	99.8	100.0	29.4	55.3	76.1	83.7	88.9	96.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Atsinanana): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013)	lef.)	<u>In</u>	tl. 2005	PPP (2013 de	e <u>f.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percentil	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People		Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		1,080	1,399	2,099	2,798	2,044	3,271	4,089	8,177	8,685	1,664	2,803	4,818	19,009	399	546	806	957	1,135	1,759
	Rate	Households	185	9.2	18.1	36.0	50.1	32.7	62.6	71.8	94.7	96.6	26.2	50.1	76.9	99.6	0.0	0.0	1.7	6.0	9.5	26.8
	Rate	People		14.3	24.7	43.8	58.6	41.0	69.3	79.3	95.7	96.5	34.0	58.6	82.1	99.6	0.0	0.0	2.9	8.8	15.1	34.7
Rural	Line	People		915	1,185	1,777	2,370	1,731	2,770	3,463	6,926	7,356	1,410	2,374	4,080	16,099	338	463	682	810	961	1,489
	Rate	Households	530	53.0	69.7	87.1	95.0	86.0	96.8	99.2	100.0	100.0	76.9	95.0	99.4	100.0	7.8	15.1	31.6	46.2	57.0	79.0
	Rate	People		65.6	80.1	93.1	97.9	92.5	99.0	99.8	100.0	100.0	85.5	97.9	99.8	100.0	10.8	21.2	41.4	58.7	69.1	86.7
<u>All</u>	Line	People		954	1,236	1,854	2,471	1,806	2,889	3,611	7,222	7,670	1,470	2,476	4,255	16,788	353	483	711	845	1,002	1,553
	Rate	Households	715	41.5	56.1	73.7	83.2	72.0	87.8	92.0	98.6	99.1	63.6	83.2	93.5	99.9	5.7	11.1	23.7	35.6	44.5	65.3
	Rate	People		53.4	67.0	81.4	88.6	80.3	91.9	94.9	99.0	99.2	73.3	88.6	95.6	99.9	8.2	16.1	32.2	46.9	56.3	74.4

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Atsinanana): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households					•					Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 ext{th}$	50th	60th	80th
Urban	Line	People		1,096	1,441	2,162	2,883	2,028	3,244	4,055	8,110	8,614	1,651	2,780	4,778	18,853	417	555	825	969	1,152	1,791
	Rate	Households	185	24.2	36.0	55.8	68.7	53.8	75.5	81.7	95.9	95.9	42.9	66.3	85.7	99.1	2.2	4.5	12.2	19.8	25.8	46.5
	Rate	People		32.2	44.5	63.4	74.9	61.1	81.7	86.9	97.0	97.0	51.2	72.6	89.7	99.0	3.0	5.8	15.9	26.6	34.2	54.9
Rural	Line	People		904	1,189	1,784	2,378	1,673	2,676	3,346	6,691	7,107	1,362	2,294	3,942	15,554	344	458	680	799	950	1,477
	Rate	Households	530	48.8	64.5	84.8	90.6	82.8	94.2	97.4	99.7	99.7	71.9	89.7	98.8	100.0	6.9	12.8	29.8	40.2	51.7	75.4
	Rate	People		61.6	76.0	93.5	96.7	91.7	98.2	99.3	99.9	99.9	82.2	96.2	99.7	100.0	9.9	18.2	40.0	52.7	64.6	85.3
<u>A11</u>	Line	People		974	1,281	1,922	2,562	1,802	2,883	3,604	7,208	7,656	1,467	2,471	4,247	16,755	370	493	733	861	1,023	1,591
	Rate	Households	715	39.2	53.4	73.5	82.1	71.5	86.9	91.3	98.2	98.2	60.6	80.6	93.7	99.6	5.1	9.6	22.9	32.2	41.7	64.2
	Rate	People		50.9	64.5	82.5	88.8	80.6	92.2	94.8	98.9	98.9	70.9	87.6	96.0	99.6	7.4	13.7	31.2	43.2	53.5	74.2

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Betsiboka): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 (lef.)	<u>In</u>	tl. 2005	PPP (2013 d	e <u>f.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percentil	le-based	lines (20	013 def.	<u>, </u>
Region	Rate	People		Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	60th	80th
<u>Urban</u>	Line	People		829	1,075	1,612	2,149	1,570	2,512	3,140	6,280	6,670	1,278	2,153	3,700	14,599	307	420	619	735	871	1,351
	Rate	Households	81	12.2	22.2	50.2	56.6	45.9	62.7	74.1	90.3	90.3	32.8	56.6	80.7	98.9	0.0	1.1	4.9	8.2	14.1	39.1
	Rate	People		15.3	27.8	57.5	63.8	52.6	68.7	78.1	89.9	89.9	41.1	63.8	83.3	99.0	0.0	1.0	7.6	10.0	18.5	47.2
Rural	Line	People		866	1,122	1,683	2,245	1,640	2,624	3,280	6,559	6,966	1,335	2,248	3,864	15,247	320	438	646	767	910	1,411
	Rate	Households	592	51.3	73.8	95.2	99.1	94.5	99.6	99.6	100.0	100.0	84.2	99.1	99.6	100.0	9.3	15.7	31.8	43.8	55.6	87.1
	Rate	People		59.9	82.1	97.3	99.6	96.9	99.7	99.7	100.0	100.0	90.4	99.6	99.7	100.0	11.3	19.0	38.6	52.2	64.2	91.9
<u>All</u>	Line	People		864	1,120	1,679	2,239	1,636	2,617	3,271	6,543	6,949	1,332	2,243	3,855	15,209	320	437	645	766	908	1,407
	Rate	Households	673	48.9	70.6	92.4	96.5	91.5	97.3	98.0	99.4	99.4	81.0	96.5	98.4	99.9	8.7	14.8	30.2	41.6	53.0	84.1
	Rate	People		57.3	78.9	94.9	97.5	94.3	97.9	98.5	99.4	99.4	87.5	97.5	98.8	99.9	10.7	17.9	36.8	49.7	61.5	89.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Betsiboka): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People		Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 ext{th}$	50th	60th	80th
Urban	Line	People		727	956	1,435	1,913	1,345	2,153	2,691	5,382	5,716	1,095	1,845	3,171	12,510	277	368	547	643	764	1,188
	Rate	Households	81	27.1	38.8	63.6	77.0	61.5	80.7	87.1	93.4	93.4	47.9	77.0	91.6	96.3	1.2	5.4	12.8	20.2	28.9	56.1
	Rate	People		36.4	50.5	72.6	82.6	71.2	85.0	89.9	94.2	94.2	59.2	82.6	92.8	96.7	2.4	7.0	17.7	28.4	38.1	66.1
Rural	Line	People		747	983	1,474	1,966	1,382	2,212	2,765	5,530	5,873	1,125	1,896	3,258	12,854	284	378	562	661	785	1,221
	Rate	Households	592	40.8	56.8	76.0	85.2	73.0	88.4	90.3	96.3	96.8	63.6	84.3	91.6	99.7	8.8	13.5	28.6	34.1	44.2	67.5
	Rate	People		50.0	66.3	81.4	87.2	79.6	89.5	90.6	97.0	97.7	72.5	86.8	91.6	99.9	11.5	17.1	35.8	42.6	53.8	76.0
<u>All</u>	Line	People		744	978	1,467	1,956	1,376	2,202	2,752	5,504	5,846	1,120	1,887	3,243	12,795	283	376	560	658	782	1,215
	Rate	Households	673	38.4	53.7	73.9	83.7	71.0	87.0	89.7	95.8	96.2	60.9	83.1	91.6	99.1	7.5	12.1	25.8	31.7	41.6	65.5
	Rate	People		47.6	63.6	79.9	86.4	78.2	88.8	90.4	96.5	97.1	70.2	86.1	91.8	99.3	10.0	15.4	32.7	40.2	51.1	74.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Boeny): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	In	tl. 2005	PPP	2013 d				PP (20			Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	40 th	50th	60th	80th
Urban	Line	People		1,117	1,448	2,172	2,896	2,115	3,385	4,231	8,461	8,987	1,722	2,900	4,985	19,669	413	565	833	990	1,174	1,820
	Rate	Households	217	9.1	13.6	34.0	53.4	33.5	65.7	76.6	97.5	98.2	19.8	53.4	84.8	100.0	0.4	0.8	5.6	7.1	11.5	23.7
	Rate	People		14.2	19.7	43.0	64.1	42.8	75.3	83.9	98.6	99.0	26.7	64.1	91.0	100.0	0.5	1.1	9.2	11.6	17.0	31.3
Rural	Line	People		761	986	1,479	1,972	1,441	2,305	2,881	5,762	6,120	1,173	1,975	3,395	13,394	281	385	568	674	799	1,239
	Rate	Households	477	51.7	66.6	83.9	92.3	83.6	94.6	97.6	99.5	99.8	75.9	92.3	98.7	99.8	7.6	15.2	33.5	43.5	54.7	78.4
	Rate	People		61.2	75.0	88.1	95.2	87.9	96.6	98.4	99.8	99.9	81.9	95.2	99.2	99.9	10.7	20.5	40.7	52.9	64.3	84.1
<u>A11</u>	Line	People		875	1,133	1,700	2,267	1,656	2,650	3,312	6,624	7,035	1,348	2,271	3,903	15,398	324	443	653	775	919	1,425
	Rate	Households	694	35.3	46.3	64.7	77.3	64.3	83.5	89.5	98.7	99.2	54.4	77.3	93.4	99.9	4.9	9.6	22.7	29.5	38.1	57.4
	Rate	People		46.2	57.3	73.7	85.3	73.5	89.8	93.8	99.4	99.6	64.2	85.3	96.6	99.9	7.5	14.3	30.7	39.8	49.2	67.2

Poverty rates are percentages. $\,$

All poverty lines are MGA per-person per-day.

Table 3 (Boeny): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	e <u>f.)</u>	$\underline{\mathbf{Intl.}}$	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u>, </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	$_{ m 10th}$	20 th	$40 ext{th}$	50 th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		1,194	1,570	2,354	3,139	2,208	3,533	4,416	8,832	9,380	1,798	3,028	5,204	20,530	454	604	898	1,055	1,254	1,950
	Rate	Households	217	14.8	24.5	44.7	63.7	39.9	69.4	83.0	98.9	99.4	28.9	61.8	88.4	100.0	1.7	3.2	8.2	11.5	14.8	34.2
	Rate	People		23.1	35.7	58.6	76.6	53.5	81.1	91.0	99.3	99.9	40.1	75.3	94.9	100.0	3.1	6.0	14.2	19.1	23.1	46.4
Rural	Line	People		764	1,004	1,506	2,008	1,413	2,260	2,825	5,650	6,001	1,150	1,937	3,329	13,135	290	386	574	675	802	1,248
	Rate	Households	477	46.7	64.1	82.2	87.2	80.4	88.2	91.6	96.6	96.8	71.6	86.1	93.4	98.4	7.3	13.5	29.9	39.4	51.7	74.7
	Rate	People		57.2	72.9	86.5	90.7	85.3	91.4	94.4	97.7	97.8	78.4	89.8	95.6	99.0	10.3	20.0	38.0	49.7	62.0	80.8
<u>All</u>	Line	People		927	1,218	1,828	2,437	1,714	2,742	3,428	6,856	7,281	1,395	2,350	4,039	15,937	352	469	697	819	973	1,514
	Rate	Households	694	32.9	47.0	66.0	77.1	62.9	80.1	87.9	97.6	97.9	53.2	75.6	91.2	99.1	4.9	9.0	20.5	27.3	35.8	57.2
	Rate	People		44.3	58.8	75.9	85.3	73.3	87.5	93.1	98.3	98.6	63.9	84.3	95.3	99.4	7.6	14.7	29.0	38.1	47.2	67.8

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Bongolava): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		820	1,062	1,593	2,124	1,551	2,482	3,103	6,206	6,591	1,263	2,127	3,656	14,426	303	415	611	726	861	1,335
	Rate	Households	118	6.7	14.4	39.2	56.2	36.7	65.5	75.6	98.3	98.3	22.2	57.0	81.5	100.0	0.0	0.0	1.7	1.7	7.6	27.4
	Rate	People		9.2	20.0	49.5	69.6	47.0	75.0	83.5	99.0	99.0	29.0	70.4	87.9	100.0	0.0	0.0	2.5	2.5	11.1	33.3
Rural	Line	People		821	1,064	1,596	2,128	1,554	2,487	3,109	6,217	6,604	1,265	2,131	3,663	14,453	304	415	612	727	863	1,337
	Rate	Households	622	52.8	72.9	91.4	96.5	90.2	98.1	99.5	99.9	99.9	81.7	96.5	99.6	100.0	3.8	11.3	29.6	43.7	56.5	84.3
	Rate	People		59.2	79.7	94.7	97.9	93.9	99.0	99.7	100.0	100.0	87.6	97.9	99.7	100.0	4.5	14.2	34.5	49.5	62.7	89.5
<u>All</u>	Line	People		821	1,064	1,596	2,127	1,554	2,487	3,108	6,217	6,603	1,265	2,131	3,663	14,451	304	415	612	727	863	1,337
	Rate	Households	740	49.8	69.0	88.0	93.8	86.6	95.9	97.9	99.8	99.8	77.8	93.9	98.4	100.0	3.6	10.5	27.8	40.9	53.2	80.5
	Rate	People		56.2	76.1	92.0	96.2	91.1	97.5	98.7	99.9	99.9	84.1	96.3	99.0	100.0	4.2	13.3	32.6	46.7	59.6	86.1

Poverty rates are percentages. $\,$

All poverty lines are MGA per-person per-day.

Table 3 (Bongolava): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 de	e <u>f.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percentil	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		881	1,158	1,737	2,316	1,629	2,606	3,258	6,515	6,920	1,326	2,233	3,839	15,145	335	446	662	778	925	1,438
	Rate	Households	118	26.5	37.2	61.2	77.6	55.3	80.8	85.1	97.7	98.3	45.6	73.7	91.3	99.4	5.4	9.7	18.7	21.6	28.4	47.8
	Rate	People		28.5	42.8	69.3	84.3	64.5	87.0	91.5	98.5	99.1	53.2	82.4	94.4	99.9	7.1	12.7	21.0	24.0	30.2	55.1
Rural	Line	People		835	1,098	1,647	2,196	1,544	2,471	3,088	6,177	6,560	1,257	2,117	3,639	14,359	317	423	628	738	877	1,364
	Rate	Households	622	53.7	72.9	90.7	96.2	89.4	97.2	98.9	99.9	99.9	80.6	95.3	99.7	99.9	3.0	10.3	30.2	43.7	57.3	84.3
	Rate	People		62.2	80.8	94.1	97.8	93.3	98.3	99.5	100.0	100.0	86.9	97.2	99.9	100.0	4.4	14.3	37.0	51.7	66.1	89.8
<u>A11</u>	Line	People		839	1,104	1,656	2,208	1,553	2,484	3,105	6,211	6,597	1,264	2,129	3,659	14,438	319	425	631	742	882	1,371
	Rate	Households	740	50.7	68.9	87.4	94.1	85.6	95.4	97.4	99.7	99.7	76.7	92.9	98.8	99.8	3.3	10.3	29.0	41.3	54.1	80.2
	Rate	People		58.8	77.0	91.7	96.5	90.4	97.2	98.7	99.8	99.9	83.5	95.7	99.3	99.9	4.7	14.2	35.4	48.9	62.5	86.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Diana): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)
Region	Rate	People		Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	$60 ext{th}$	80 th
<u>Urban</u>	Line	People		784	1,015	1,523	2,030	1,483	2,373	2,967	5,933	6,301	1,208	2,034	3,496	13,792	290	396	584	694	823	1,276
	Rate	Households	268	20.0	33.1	56.4	72.0	55.6	81.3	87.6	97.0	97.9	43.9	72.3	92.3	100.0	1.8	3.0	10.6	14.7	21.1	45.8
	Rate	People		23.8	40.0	65.5	81.6	65.1	89.1	92.7	98.0	98.7	52.0	81.9	95.2	100.0	3.2	4.8	14.0	17.5	25.6	54.6
Rural	Line	People		865	1,120	1,680	2,240	1,637	2,619	3,274	6,547	6,954	1,333	2,244	3,857	15,219	320	437	645	766	908	1,408
	Rate	Households	417	15.7	25.2	51.2	71.8	50.1	78.4	88.5	98.0	98.0	36.7	72.0	92.9	100.0	0.6	1.9	6.6	11.0	18.2	41.0
	Rate	People		23.1	34.0	61.2	80.3	60.3	85.8	92.8	98.6	98.6	45.5	80.5	95.7	100.0	0.8	2.5	9.0	14.3	26.2	49.8
<u>All</u>	Line	People		832	1,078	1,617	2,155	1,575	2,519	3,149	6,299	6,690	1,282	2,159	3,711	14,641	308	421	620	737	874	1,355
	Rate	Households	685	17.5	28.6	53.5	71.9	52.5	79.7	88.1	97.6	98.0	39.8	72.1	92.6	100.0	1.1	2.3	8.3	12.6	19.5	43.1
	Rate	People		23.4	36.4	62.9	80.8	62.2	87.2	92.7	98.3	98.6	48.1	81.0	95.5	100.0	1.8	3.4	11.0	15.5	26.0	51.7

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Diana): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	$\underline{\mathbf{Intl.}}$	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		844	1,109	1,664	2,218	1,560	2,497	3,121	6,241	6,629	1,270	2,140	3,677	14,509	321	427	635	746	886	1,378
	Rate	Households	268	17.4	34.1	59.4	72.4	53.9	78.4	86.2	97.1	97.4	40.2	70.4	91.2	100.0	0.8	2.4	8.9	12.8	20.7	44.7
	Rate	People		22.3	41.7	70.9	82.7	64.5	87.1	92.2	98.5	98.6	50.3	81.1	94.5	100.0	1.6	3.8	12.3	16.2	26.9	55.7
Rural	Line	People		979	1,287	1,931	2,575	1,811	2,898	3,622	7,244	7,694	1,474	2,483	4,268	16,840	372	496	737	865	1,029	1,599
	Rate	Households	417	17.9	31.8	61.9	79.1	56.8	83.6	90.4	99.3	99.3	42.2	77.4	94.6	100.0	1.0	3.6	8.7	13.1	19.0	49.1
	Rate	People		24.4	41.0	70.5	86.4	65.9	89.9	94.6	99.5	99.5	51.4	85.0	97.3	100.0	1.3	5.2	12.7	18.9	26.0	58.1
<u>All</u>	Line	People		933	1,227	1,841	2,455	1,727	2,762	3,453	6,906	7,335	1,406	2,367	4,069	16,054	355	472	702	825	981	1,525
	Rate	Households	685	17.7	32.6	61.0	76.7	55.8	81.8	88.9	98.5	98.6	41.5	74.9	93.4	100.0	0.9	3.2	8.8	13.0	19.6	47.5
	Rate	People		23.7	41.2	70.6	85.2	65.4	89.0	93.8	99.2	99.2	51.0	83.7	96.4	100.0	1.4	4.8	12.5	18.0	26.3	57.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Ihorombe): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a:	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		789	1,022	1,533	2,044	1,494	2,390	2,987	5,974	6,345	1,216	2,048	3,520	13,887	292	399	588	699	829	1,285
	Rate	Households	110	9.2	23.5	36.2	58.1	36.2	62.9	81.7	93.2	93.2	27.6	58.1	87.7	100.0	0.0	0.0	3.2	5.4	9.2	28.7
	Rate	People		17.0	31.8	45.0	67.2	45.0	73.1	87.4	94.3	94.3	36.1	67.2	90.6	100.0	0.0	0.0	6.6	13.0	17.0	36.8
Rural	Line	People		939	1,217	1,825	2,433	1,778	2,844	3,555	7,111	7,552	1,447	2,437	4,189	16,529	347	475	700	832	987	1,529
	Rate	Households	604	63.6	75.7	90.2	94.4	89.9	96.2	98.6	99.7	99.8	82.9	94.4	98.8	100.0	5.0	16.5	39.7	54.7	65.5	85.6
	Rate	People		70.7	80.9	91.5	96.0	91.3	97.0	99.1	99.9	99.9	86.7	96.0	99.3	100.0	6.4	21.9	47.3	62.1	72.1	88.6
<u>All</u>	Line	People		926	1,200	1,800	2,399	1,753	2,805	3,506	7,011	7,447	1,427	2,403	4,131	16,298	342	468	691	820	973	1,508
	Rate	Households	714	58.9	71.2	85.5	91.2	85.3	93.3	97.2	99.1	99.2	78.1	91.2	97.8	100.0	4.6	15.1	36.5	50.4	60.6	80.7
	Rate	People		66.0	76.6	87.4	93.4	87.3	94.9	98.1	99.4	99.4	82.3	93.4	98.5	100.0	5.9	20.0	43.8	57.8	67.2	84.1

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Ihorombe): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households					•					Povert	y lines a	nd pov	ertv rat	es						
	or	or		Nat	ional	(2013 c	lef.)	In	tl. 2005	PPP	2013 d		^		PP (20			Percenti	le-based	lines (2	013 def.`	<u> </u>
Region	Rate	People	\boldsymbol{n}	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10 th	$20 \mathrm{th}$	$40 ext{th}$	50th	60th	80th
Urban	Line	People		900	1,183	1,775	2,366	1,664	2,663	3,328	6,657	7,070	1,355	2,282	3,922	15,474	342	455	677	795	945	1,470
	Rate	Households	110	48.3	60.7	73.4	83.4	69.8	85.5	91.1	98.6	99.1	63.3	83.2	95.2	100.0	6.9	16.8	37.2	42.9	50.7	63.9
	Rate	People		55.5	66.9	79.5	88.9	75.1	90.6	94.2	98.8	99.3	69.0	88.7	96.5	100.0	9.6	23.8	44.1	50.4	57.7	69.8
Rural	Line	People		1,009	1,326	1,990	2,653	1,866	2,985	3,732	7,463	7,926	1,519	2,558	4,397	17,348	384	510	759	892	1,060	1,648
	Rate	Households	604	61.3	75.1	89.0	93.7	87.3	95.4	97.8	99.6	99.6	80.0	93.2	98.6	100.0	5.6	16.5	41.1	54.4	63.6	83.0
	Rate	People		70.0	80.8	91.7	96.3	90.1	97.3	98.7	99.8	99.8	84.3	95.7	99.1	100.0	8.0	22.5	50.0	63.4	71.9	87.0
<u>A11</u>	Line	People		987	1,297	1,946	2,595	1,825	2,920	3,650	7,300	7,753	1,486	2,502	4,301	16,968	375	499	742	872	1,036	1,612
	Rate	Households	714	58.7	72.3	86.0	91.7	83.9	93.4	96.5	99.4	99.5	76.7	91.3	97.9	100.0	5.9	16.6	40.3	52.2	61.1	79.3
	Rate	People		67.0	78.0	89.2	94.8	87.1	96.0	97.8	99.6	99.7	81.2	94.3	98.6	100.0	8.3	22.8	48.8	60.7	69.0	83.5

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Itasy): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	e-based	lines (20	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
Urban	Line	People		1,126	1,458	2,188	2,917	2,131	3,409	4,262	8,523	9,053	1,735	2,922	5,022	19,813	416	570	840	997	1,183	1,833
	Rate	Households	86	53.5	73.4	92.0	95.5	92.0	97.0	100.0	100.0	100.0	78.0	95.5	100.0	100.0	7.3	18.1	33.0	45.2	61.4	80.1
	Rate	People		60.8	79.7	95.0	97.8	95.0	98.4	100.0	100.0	100.0	84.0	97.8	100.0	100.0	9.8	24.1	41.8	54.6	67.9	85.8
Rural	Line	People		739	957	1,436	1,914	1,398	2,237	2,797	5,594	5,941	1,138	1,917	3,296	13,003	273	374	551	654	776	1,203
	Rate	Households	624	41.6	67.2	92.3	99.4	92.2	99.5	99.7	100.0	100.0	83.0	99.4	99.7	100.0	2.1	5.2	19.5	32.5	47.0	85.6
	Rate	People		49.3	74.8	95.3	99.6	95.1	99.7	99.9	100.0	100.0	88.2	99.6	99.9	100.0	2.5	6.4	24.1	39.0	55.0	90.3
<u>All</u>	Line	People		756	980	1,469	1,959	1,431	2,290	2,863	5,725	6,081	1,165	1,963	3,373	13,309	280	383	564	670	794	1,231
	Rate	Households	710	42.1	67.5	92.3	99.2	92.2	99.4	99.7	100.0	100.0	82.8	99.2	99.7	100.0	2.3	5.8	20.2	33.1	47.7	85.3
	Rate	People		49.8	75.0	95.3	99.6	95.1	99.6	99.9	100.0	100.0	88.0	99.6	99.9	100.0	2.9	7.2	24.9	39.7	55.6	90.1

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Itasy): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	40 th	50th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		1,126	1,481	2,221	2,961	2,083	3,332	4,165	8,331	8,848	1,696	2,856	4,908	19,366	428	570	847	995	1,183	1,839
	Rate	Households	86	61.5	75.9	94.2	98.4	92.2	99.4	100.0	100.0	100.0	81.7	98.4	100.0	100.0	3.8	16.6	36.3	49.9	67.0	84.4
	Rate	People		70.1	82.4	96.3	99.5	95.0	99.9	100.0	100.0	100.0	86.7	99.5	100.0	100.0	5.0	20.9	46.4	58.4	74.1	89.3
Rural	Line	People		672	883	1,325	1,766	1,242	1,988	2,485	4,969	5,278	1,011	1,703	2,928	11,552	255	340	505	594	706	1,097
	Rate	Households	624	32.1	56.6	81.8	92.1	79.0	94.3	97.9	99.9	100.0	66.4	91.1	99.0	100.0	0.8	3.4	12.7	23.0	36.0	71.5
	Rate	People		41.8	67.3	88.3	95.7	86.5	96.8	99.1	100.0	100.0	76.3	94.9	99.6	100.0	1.6	4.8	18.0	31.3	46.3	80.6
<u>All</u>	Line	People		721	949	1,423	1,898	1,335	2,135	2,669	5,338	5,670	1,087	1,830	3,145	12,409	274	365	543	638	758	1,179
	Rate	Households	710	35.3	58.7	83.1	92.8	80.4	94.9	98.1	99.9	100.0	68.1	91.9	99.1	100.0	1.1	4.8	15.2	25.9	39.3	72.9
	Rate	People		44.9	69.0	89.2	96.1	87.4	97.1	99.2	100.0	100.0	77.4	95.4	99.7	100.0	2.0	6.6	21.1	34.3	49.4	81.5

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Matsiatra Ambony): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		1,050	1,361	2,041	2,722	1,988	3,181	3,977	7,953	8,447	1,619	2,726	4,686	18,488	388	531	783	931	1,103	1,710
	Rate	Households	201	28.3	41.9	68.2	81.4	64.0	88.1	94.2	99.4	99.4	51.6	81.4	94.6	100.0	0.6	5.8	15.3	20.9	30.7	56.6
	Rate	People		35.3	49.0	73.9	85.5	69.1	90.6	95.6	99.9	99.9	57.9	85.5	95.7	100.0	0.5	6.7	20.1	27.1	37.9	62.1
Rural	Line	People		792	1,026	1,539	2,051	1,499	2,398	2,997	5,995	6,367	1,220	2,055	3,532	13,935	293	401	591	701	832	1,289
	Rate	Households	512	50.2	69.4	90.2	95.1	88.6	96.5	98.0	99.7	100.0	79.9	95.1	98.6	100.0	2.6	6.3	27.3	40.4	53.8	81.9
	Rate	People		58.3	77.5	94.3	97.3	93.2	98.3	99.2	99.8	100.0	86.4	97.3	99.3	100.0	3.3	8.2	33.7	48.4	61.8	88.2
<u>All</u>	Line	People		842	1,091	1,636	2,182	1,594	2,550	3,188	6,376	6,772	1,298	2,186	3,756	14,821	311	426	628	746	885	1,371
	Rate	Households	713	45.4	63.4	85.5	92.1	83.2	94.7	97.2	99.7	99.9	73.7	92.1	97.7	100.0	2.2	6.2	24.7	36.2	48.8	76.4
	Rate	People		53.9	71.9	90.3	95.0	88.5	96.8	98.5	99.8	100.0	80.9	95.0	98.6	100.0	2.8	7.9	31.1	44.3	57.1	83.2

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Matsiatra Ambony): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Poverty	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		1,285	1,690	2,536	3,381	2,378	3,805	4,756	9,511	10,102	1,936	3,260	5,604	22,110	489	651	967	1,136	1,351	2,100
	Rate	Households	201	45.6	57.2	83.9	92.5	79.9	95.1	96.2	100.0	100.0	67.2	92.5	98.5	100.0	1.5	8.7	24.8	32.8	47.4	72.7
	Rate	People		55.5	65.9	89.6	95.5	86.3	96.6	97.3	100.0	100.0	75.1	95.5	98.3	100.0	1.7	12.6	33.7	43.0	57.3	79.8
Rural	Line	People		804	1,057	1,586	2,114	1,487	2,379	2,974	5,948	6,318	1,211	2,039	3,505	13,827	306	407	605	711	845	1,313
	Rate	Households	512	48.9	69.1	90.2	94.7	87.9	96.5	98.2	99.6	99.6	78.0	94.2	98.9	99.8	2.4	6.8	27.1	40.9	53.6	82.7
	Rate	People		58.5	78.0	94.8	97.5	93.3	98.1	99.1	99.8	99.8	85.8	97.2	99.4	99.8	3.2	9.1	34.4	49.5	63.2	89.3
<u>All</u>	Line	People		895	1,177	1,766	2,355	1,656	2,650	3,313	6,625	7,037	1,348	2,271	3,903	15,401	340	453	674	791	941	1,463
	Rate	Households	713	48.2	66.5	88.8	94.3	86.2	96.2	97.7	99.7	99.7	75.6	93.8	98.8	99.8	2.2	7.2	26.6	39.2	52.3	80.6
	Rate	People		57.9	75.7	93.8	97.1	92.0	97.8	98.8	99.8	99.8	83.8	96.9	99.2	99.9	2.9	9.8	34.3	48.3	62.1	87.5

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Melaky): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	e-based	lines (20)13 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
$\underline{\mathbf{Urban}}$	Line	People		981	1,270	1,906	2,541	1,856	2,970	3,712	7,425	7,886	1,511	2,545	4,374	17,259	363	496	731	869	1,030	1,597
	Rate	Households	82	43.7	61.3	84.9	94.4	80.7	98.7	100.0	100.0	100.0	76.2	94.4	100.0	100.0	0.0	6.5	22.5	39.7	48.2	76.2
	Rate	People		60.5	79.0	95.7	98.7	93.8	99.7	100.0	100.0	100.0	90.8	98.7	100.0	100.0	0.0	11.6	36.2	56.3	64.9	90.8
Rural	Line	People		877	1,136	1,705	2,273	1,660	2,657	3,321	6,641	7,054	1,352	2,277	3,913	15,438	324	444	654	777	921	1,428
	Rate	Households	576	58.6	74.6	92.8	97.2	92.1	99.0	100.0	100.0	100.0	83.6	97.2	100.0	100.0	4.5	14.5	36.5	48.5	61.1	86.0
	Rate	People		68.5	81.8	95.4	98.2	94.9	99.5	100.0	100.0	100.0	88.1	98.2	100.0	100.0	6.4	20.4	46.3	58.8	70.4	89.6
<u>All</u>	Line	People		883	1,144	1,716	2,288	1,671	2,674	3,343	6,685	7,100	1,361	2,292	3,939	15,541	327	447	659	782	928	1,438
	Rate	Households	658	57.7	73.8	92.4	97.0	91.5	99.0	100.0	100.0	100.0	83.1	97.0	100.0	100.0	4.2	14.0	35.7	48.0	60.4	85.4
	Rate	People		68.1	81.6	95.4	98.3	94.9	99.5	100.0	100.0	100.0	88.3	98.3	100.0	100.0	6.0	19.9	45.7	58.7	70.1	89.7

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Melaky): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households					•					Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	<u>lef.)</u>	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.)	<u> </u>
Region	Rate	People		Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	40 th	50 th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		953	1,253	1,879	2,506	1,762	2,820	3,524	7,049	7,487	1,435	2,416	4,153	16,386	362	482	717	842	1,001	1,556
	Rate	Households	82	52.3	68.8	86.2	94.4	81.5	96.1	98.2	100.0	100.0	75.2	94.1	99.3	100.0	5.3	11.4	29.9	47.0	57.1	77.8
	Rate	People		65.9	80.3	93.8	97.6	90.5	98.5	99.5	100.0	100.0	85.5	97.5	99.9	100.0	9.3	18.2	43.1	60.3	70.4	87.5
Rural	Line	People		874	1,149	1,723	2,297	1,616	2,585	3,232	6,464	6,865	1,316	2,216	3,808	15,025	332	442	657	772	918	1,427
	Rate	Households	576	47.4	61.7	76.8	85.4	74.3	89.1	93.2	98.0	98.1	67.9	84.3	95.9	99.8	6.7	16.6	34.5	42.4	49.2	69.9
	Rate	People		56.7	70.2	83.1	91.0	80.9	94.2	96.9	99.3	99.3	76.4	89.9	98.2	99.8	9.2	22.4	43.2	51.7	58.7	77.7
<u>All</u>	Line	People		903	1,188	1,781	2,375	1,670	2,673	3,341	6,682	7,097	1,360	2,290	3,937	15,532	343	457	679	798	949	1,475
	Rate	Households	658	49.2	64.3	80.2	88.6	76.9	91.6	95.0	98.7	98.8	70.5	87.8	97.1	99.9	6.2	14.7	32.8	44.0	52.0	72.7
	Rate	People		60.1	74.0	87.1	93.5	84.5	95.8	97.9	99.5	99.6	79.8	92.8	98.8	99.9	9.2	20.9	43.2	54.9	63.1	81.3

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Menabe): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	$20 \mathrm{th}$	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
Urban	Line	People		695	901	1,351	1,801	1,316	2,106	2,632	5,264	5,591	1,071	1,804	3,101	12,236	257	352	519	616	730	1,132
	Rate	Households	130	36.2	58.7	82.0	91.9	81.0	93.3	97.6	100.0	100.0	70.9	91.9	98.0	100.0	1.0	3.0	13.8	25.6	42.6	75.2
	Rate	People		44.8	69.0	88.7	95.9	87.8	96.9	98.8	100.0	100.0	82.4	95.9	99.0	100.0	2.1	5.8	18.0	31.7	52.3	84.3
Rural	Line	People		849	1,100	1,651	2,201	1,608	2,572	3,216	6,431	6,830	1,309	2,205	3,789	14,949	314	430	633	752	892	1,383
	Rate	Households	579	44.6	58.4	76.7	85.5	76.0	89.0	94.0	99.3	99.3	68.3	85.5	95.2	99.8	6.0	11.8	27.7	37.2	46.8	70.5
	Rate	People		53.1	67.2	83.3	90.5	82.7	93.5	96.9	99.6	99.6	76.5	90.5	97.4	100.0	9.4	16.9	36.8	46.0	55.6	78.2
<u>A11</u>	Line	People		834	1,081	1,622	2,162	1,580	2,527	3,159	6,318	6,710	1,286	2,166	3,722	14,687	309	422	622	739	877	1,359
	Rate	Households	709	43.9	58.4	77.1	86.1	76.4	89.4	94.3	99.4	99.4	68.5	86.1	95.4	99.8	5.6	11.0	26.4	36.2	46.5	70.9
	Rate	People		52.3	67.4	83.8	91.0	83.2	93.8	97.1	99.7	99.7	77.1	91.0	97.6	100.0	8.7	15.8	35.0	44.6	55.3	78.8

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Menabe): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		786	1,034	1,550	2,067	1,454	2,326	2,908	5,816	6,177	1,184	1,994	3,427	13,520	299	398	591	695	826	1,284
	Rate	Households	130	46.9	66.9	87.0	93.1	83.5	94.2	97.9	100.0	100.0	73.1	93.1	98.6	100.0	2.8	8.2	22.7	38.6	51.7	78.1
	Rate	People		57.8	77.5	92.4	96.1	90.3	97.1	98.9	100.0	100.0	82.8	96.1	99.3	100.0	4.8	12.5	29.7	48.3	63.0	86.5
Rural	Line	People		859	1,129	1,694	2,258	1,588	2,541	3,177	6,353	6,748	1,293	2,178	3,743	14,768	327	435	646	759	902	1,403
	Rate	Households	579	37.5	53.7	70.8	82.5	68.0	87.0	91.5	97.8	98.2	60.3	80.9	93.9	99.8	5.7	9.9	23.9	31.8	39.6	63.7
	Rate	People		46.1	63.2	78.8	89.0	76.4	92.7	96.0	99.0	99.3	69.4	88.0	97.1	100.0	8.9	15.2	32.6	40.7	48.4	72.3
<u>All</u>	Line	People		831	1,093	1,639	2,186	1,538	2,460	3,075	6,150	6,532	1,252	2,108	3,623	14,296	316	421	625	735	873	1,358
	Rate	Households	709	40.8	58.4	76.5	86.2	73.5	89.5	93.7	98.6	98.8	64.8	85.2	95.6	99.9	4.7	9.3	23.5	34.2	43.9	68.8
	Rate	People		50.5	68.6	83.9	91.7	81.7	94.4	97.1	99.4	99.6	74.4	91.0	98.0	100.0	7.4	14.2	31.5	43.6	53.9	77.7

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Sava): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	In	tl. 2005	PPP	2013 d	ef.)	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
Urban	Line	People		904	1,171	1,756	2,341	1,711	2,737	3,421	6,842	7,267	1,393	2,345	4,031	15,905	334	457	674	801	949	1,471
	Rate	Households	141	31.0	45.0	63.0	77.9	63.0	84.2	90.9	98.7	98.7	49.6	77.9	93.3	100.0	1.8	5.5	16.1	20.6	32.7	55.0
	Rate	People		38.9	54.6	71.9	83.9	71.9	89.1	92.2	99.3	99.3	59.8	83.9	94.5	100.0	3.1	9.3	23.6	28.4	41.8	65.1
Rural	Line	People		877	1,136	1,704	2,272	1,660	2,656	3,319	6,639	7,051	1,351	2,276	3,911	15,432	324	444	654	777	921	1,428
	Rate	Households	573	51.7	67.0	84.9	92.1	83.8	94.5	97.1	99.3	99.3	76.6	92.1	97.8	100.0	4.3	13.6	33.3	43.0	53.8	78.9
	Rate	People		59.3	74.5	88.2	93.9	87.4	96.0	98.0	99.7	99.7	82.0	93.9	98.6	100.0	5.9	18.2	40.3	50.8	61.5	83.9
<u>A11</u>	Line	People		880	1,140	1,711	2,281	1,666	2,666	3,332	6,665	7,078	1,356	2,285	3,927	15,492	326	445	656	780	925	1,433
	Rate	Households	714	48.9	64.0	81.9	90.2	81.0	93.1	96.3	99.3	99.3	73.0	90.2	97.2	100.0	4.0	12.5	31.0	40.0	51.0	75.7
	Rate	People		56.7	71.9	86.1	92.6	85.5	95.1	97.3	99.7	99.7	79.1	92.6	98.1	100.0	5.5	17.1	38.2	47.9	59.0	81.5

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Sava): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		1,018	1,339	2,008	2,677	1,883	3,013	3,766	7,533	8,000	1,533	2,582	4,438	17,510	387	515	766	900	1,070	1,663
	Rate	Households	141	50.0	64.1	81.9	89.2	79.5	91.5	95.9	100.0	100.0	70.8	88.7	97.4	100.0	3.6	11.0	30.4	41.4	54.4	73.6
	Rate	People		61.3	74.0	87.0	92.7	86.1	94.3	97.4	100.0	100.0	79.7	92.3	98.0	100.0	5.9	16.3	40.5	52.2	66.1	81.7
Rural	Line	People		895	1,177	1,766	2,354	1,656	2,649	3,312	6,623	7,035	1,348	2,270	3,902	15,396	340	453	673	791	940	1,462
	Rate	Households	573	58.4	73.6	91.5	97.0	88.7	97.8	98.8	99.5	99.7	80.0	96.2	99.0	100.0	5.4	15.2	39.2	49.0	60.3	83.6
	Rate	People		67.7	81.7	94.6	98.2	92.7	98.9	99.4	99.8	99.9	87.9	97.8	99.6	100.0	7.8	22.0	48.6	59.0	69.4	90.1
<u>All</u>	Line	People		926	1,217	1,826	2,434	1,712	2,740	3,425	6,849	7,274	1,394	2,348	4,035	15,921	352	468	696	818	972	1,512
	Rate	Households	714	56.3	71.2	89.1	95.1	86.5	96.3	98.1	99.6	99.8	77.7	94.4	98.6	100.0	4.9	14.2	37.0	47.1	58.8	81.1
	Rate	People		66.1	79.8	92.7	96.9	91.1	97.7	98.9	99.8	99.9	85.8	96.5	99.2	100.0	7.4	20.6	46.6	57.3	68.6	88.0

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Sofia): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
<u>Urban</u>	Line	People		801	1,038	1,557	2,076	1,517	2,427	3,034	6,068	6,444	1,235	2,080	3,575	14,104	296	405	598	710	842	1,305
	Rate	Households	113	44.4	57.3	76.7	86.0	76.0	89.0	92.9	99.2	99.2	66.9	86.0	96.7	100.0	0.0	5.3	28.9	37.5	45.1	67.6
	Rate	People		55.0	64.7	82.3	90.2	82.1	92.2	94.2	99.8	99.8	73.8	90.2	98.2	100.0	0.0	8.7	41.1	49.8	56.0	74.6
Rural	Line	People		907	1,176	1,763	2,351	1,718	2,748	3,435	6,871	7,298	1,398	2,355	4,048	15,972	336	459	677	804	953	1,478
	Rate	Households	591	65.0	76.4	89.6	94.5	88.5	96.7	97.9	99.6	100.0	83.3	94.5	98.5	100.0	9.0	17.7	41.6	54.4	67.2	85.2
	Rate	People		73.8	83.9	93.9	97.1	92.8	98.2	99.1	99.8	100.0	89.1	97.1	99.4	100.0	12.7	24.8	52.4	64.9	76.1	90.6
<u>All</u>	Line	People		899	1,165	1,748	2,330	1,703	2,724	3,405	6,810	7,233	1,386	2,334	4,012	15,830	333	455	671	797	945	1,465
	Rate	Households	704	63.5	74.9	88.7	93.9	87.5	96.1	97.6	99.6	99.9	82.1	93.9	98.3	100.0	8.3	16.8	40.7	53.1	65.6	83.9
	Rate	People		72.3	82.4	93.0	96.6	92.0	97.7	98.7	99.8	100.0	87.9	96.6	99.3	100.0	11.7	23.5	51.5	63.7	74.5	89.4

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Sofia): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	$_{ m Line}$	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	<u>lef.)</u>	<u>In</u>	tl. 2005	PPP (2013 d	e <u>f.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	$60 \mathrm{th}$	80 th
<u>Urban</u>	Line	People		944	1,242	1,862	2,483	1,747	2,794	3,493	6,986	7,420	1,422	2,395	4,116	16,240	359	478	710	835	992	1,542
	Rate	Households	113	58.1	70.7	84.8	91.0	80.2	95.6	97.3	99.6	99.6	73.6	91.0	98.5	100.0	2.4	12.8	39.3	48.9	59.9	76.2
	Rate	People		69.0	77.9	92.3	94.4	86.8	96.7	98.0	99.9	99.9	81.3	94.4	99.2	100.0	5.6	19.3	52.9	62.4	69.8	83.4
Rural	Line	People		915	1,204	1,805	2,407	1,693	2,709	3,386	6,772	7,193	1,378	2,321	3,990	15,743	348	463	689	809	962	1,495
	Rate	Households	591	62.5	76.9	89.0	94.4	88.0	95.7	98.1	99.7	99.7	82.2	94.0	98.4	100.0	11.2	18.8	43.0	53.4	66.4	84.6
	Rate	People		72.8	84.8	93.7	97.3	93.1	97.9	99.3	99.9	99.9	88.2	97.2	99.4	100.0	16.1	26.8	54.2	65.1	76.0	90.0
<u>A11</u>	Line	People		919	1,208	1,813	2,417	1,700	2,720	3,400	6,799	7,221	1,384	2,331	4,006	15,805	349	465	691	812	965	1,501
	Rate	Households	704	61.9	76.1	88.5	94.0	87.0	95.6	98.0	99.7	99.7	81.1	93.6	98.4	100.0	10.1	18.0	42.6	52.8	65.6	83.6
	Rate	People		72.3	84.0	93.5	97.0	92.3	97.7	99.1	99.9	99.9	87.4	96.9	99.3	100.0	14.8	25.9	54.1	64.8	75.2	89.2

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Vakinankaratra): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Poverty	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
<u>Urban</u>	Line	People		1,126	1,458	2,188	2,917	2,131	3,409	4,262	8,524	9,053	1,735	2,922	5,022	19,814	416	570	840	997	1,183	1,833
	Rate	Households	174	20.0	37.4	64.5	76.9	61.6	84.7	92.9	98.9	98.9	48.1	76.9	94.7	100.0	0.0	2.1	8.5	13.8	22.2	50.5
	Rate	People		26.0	44.4	71.3	82.3	69.2	88.9	95.0	99.6	99.6	56.8	82.3	95.9	100.0	0.0	3.3	11.3	17.9	28.4	59.4
Rural	Line	People		1,246	1,615	2,422	3,229	2,359	3,775	4,718	9,437	10,023	1,921	3,235	5,560	21,936	461	631	930	1,104	1,309	2,030
	Rate	Households	556	79.7	91.1	98.2	99.4	98.1	99.4	100.0	100.0	100.0	94.9	99.4	100.0	100.0	8.4	26.4	59.9	72.0	82.8	95.8
	Rate	People		87.5	95.6	99.5	99.8	99.4	99.8	100.0	100.0	100.0	97.8	99.8	100.0	100.0	12.7	36.1	70.4	81.3	90.1	98.2
<u>All</u>	Line	People		1,228	1,590	2,386	3,181	2,324	3,718	4,647	9,295	9,872	1,892	3,186	5,476	21,606	454	621	916	1,088	1,290	1,999
	Rate	Households	730	69.3	81.7	92.4	95.4	91.7	96.8	98.8	99.8	99.8	86.7	95.4	99.1	100.0	7.0	22.1	51.0	61.8	72.2	87.9
	Rate	People		78.0	87.7	95.1	97.1	94.7	98.1	99.2	99.9	99.9	91.5	97.1	99.4	100.0	10.7	31.0	61.2	71.4	80.5	92.2

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Vakinankaratra): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	y lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 (lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	60th	80th
Urban	Line	People		1,251	1,646	2,468	3,291	2,315	3,704	4,629	9,259	9,834	1,884	3,174	5,455	21,523	476	633	941	1,106	1,315	2,044
	Rate	Households	174	33.4	52.3	72.7	86.1	69.6	91.9	95.3	99.0	99.0	59.3	85.0	98.6	100.0	1.6	8.6	20.7	29.2	39.9	65.0
	Rate	People		42.2	61.9	78.8	90.8	76.8	94.8	96.7	99.7	99.7	68.7	89.9	99.5	100.0	2.3	11.7	26.3	36.2	49.6	72.9
Rural	Line	People		1,240	1,631	2,447	3,262	2,295	3,671	4,589	9,178	9,748	1,868	3,146	5,408	21,336	472	628	933	1,096	1,303	2,026
	Rate	Households	556	78.1	88.5	96.6	99.0	95.8	99.3	99.3	100.0	100.0	91.8	98.8	99.6	100.0	8.6	24.3	57.0	71.2	81.2	93.7
	Rate	People		86.8	94.4	98.7	99.7	98.4	99.7	99.7	100.0	100.0	96.4	99.7	99.8	100.0	13.6	33.9	68.3	80.8	89.2	97.3
<u>All</u>	Line	People		1,242	1,634	2,451	3,268	2,298	3,677	4,597	9,193	9,764	1,871	3,151	5,416	21,370	472	629	935	1,098	1,305	2,030
	Rate	Households	730	69.3	81.3	91.9	96.5	90.6	97.8	98.5	99.8	99.8	85.4	96.1	99.4	100.0	7.2	21.2	49.8	62.9	73.1	88.0
	Rate	People		78.7	88.5	95.1	98.1	94.5	98.8	99.2	99.9	99.9	91.4	97.9	99.8	100.0	11.6	29.8	60.7	72.7	82.0	92.9

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Vatovavy-Fitovinany): World-Bank-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Poverty	lines a	nd pov	erty rat	es						
	or	or		Nat	ional	(2013 (lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	Intl.	2011 P	PP (20	13 def.)		Percenti	le-based	lines (2	013 def.)
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50th	$60 \mathrm{th}$	80th
Urban	Line	People		770	997	1,496	1,994	1,457	2,331	2,914	5,827	6,189	1,186	1,998	3,433	13,546	285	389	574	682	808	1,253
	Rate	Households	84	47.9	64.4	79.9	89.4	79.9	94.1	97.7	100.0	100.0	70.4	89.4	97.7	100.0	9.6	16.8	34.7	43.1	52.5	75.1
	Rate	People		57.0	76.2	87.0	93.5	87.0	96.4	99.2	100.0	100.0	81.2	93.5	99.2	100.0	13.1	21.6	43.1	50.7	62.9	83.3
Rural	Line	People		825	1,069	1,604	2,139	1,563	2,500	3,125	6,251	6,639	1,272	2,143	3,683	14,530	305	418	616	731	867	1,344
	Rate	Households	642	55.4	70.3	87.1	93.6	86.1	95.6	98.2	99.6	99.8	78.1	93.6	98.8	100.0	6.0	17.7	39.8	49.4	58.3	80.2
	Rate	People		67.0	79.6	92.5	96.5	91.9	97.7	99.2	99.7	99.9	85.8	96.5	99.4	100.0	7.9	24.3	51.1	61.8	69.5	87.7
<u>All</u>	Line	People		823	1,066	1,600	2,133	1,558	2,493	3,116	6,233	6,620	1,269	2,137	3,672	14,488	304	416	614	729	865	1,340
	Rate	Households	726	55.1	70.0	86.8	93.4	85.8	95.5	98.2	99.7	99.9	77.8	93.4	98.7	100.0	6.2	17.7	39.6	49.1	58.0	80.0
	Rate	People		66.6	79.4	92.2	96.4	91.6	97.6	99.2	99.7	99.9	85.6	96.4	99.4	100.0	8.1	24.2	50.7	61.4	69.2	87.6

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 3 (Vatovavy-Fitovinany): INSTAT-definition poverty lines and poverty rates for households and people by urban/rural/all

	Line	Households										Povert	lines a	nd pov	erty rat	es						
	or	or		Nat	tional	(2013 c	lef.)	<u>In</u>	tl. 2005	PPP (2013 d	<u>ef.)</u>	<u>Intl.</u>	2011 P	PP (20	13 def.)		Percenti	le-based	lines (20	013 def.	<u> </u>
Region	Rate	People	n	Food	100%	150%	200%	\$1.25	\$2.00	\$2.50	\$5.00	\$8.44	\$1.90	\$3.20	\$5.50	\$21.70	10th	20 th	$40 ext{th}$	50 th	60th	80th
<u>Urban</u>	Line	People		812	1,067	1,601	2,135	1,501	2,402	3,003	6,006	6,379	1,222	2,059	3,538	13,961	309	411	611	717	853	1,326
	Rate	Households	84	54.6	66.5	79.3	90.7	78.1	91.5	96.9	99.3	99.3	70.0	90.7	99.3	100.0	10.4	17.4	34.1	43.8	57.0	73.0
	Rate	People		67.5	79.6	87.3	93.3	85.7	93.9	98.6	99.7	99.7	81.4	93.3	99.7	100.0	14.7	22.9	45.5	56.5	70.9	82.7
Rural	Line	People		806	1,059	1,589	2,119	1,490	2,384	2,981	5,961	6,331	1,213	2,043	3,512	13,857	306	408	606	712	846	1,316
	Rate	Households	642	56.6	70.0	87.4	94.2	84.8	95.1	97.4	99.9	99.9	76.1	93.7	98.4	100.0	6.1	17.7	39.9	49.6	58.9	80.2
	Rate	People		68.0	79.3	93.1	97.5	91.1	97.9	99.0	99.9	99.9	84.3	97.0	99.4	100.0	7.9	25.3	50.8	60.7	69.7	87.9
<u>All</u>	Line	People		807	1,061	1,591	2,121	1,492	2,387	2,984	5,968	6,339	1,215	2,046	3,516	13,873	307	408	607	713	847	1,318
	Rate	Households	726	56.3	69.4	86.0	93.6	83.7	94.5	97.3	99.8	99.8	75.1	93.2	98.5	100.0	6.8	17.7	38.9	48.6	58.5	79.0
	Rate	People		67.9	79.4	92.2	96.8	90.2	97.3	98.9	99.9	99.9	83.9	96.4	99.4	100.0	9.0	24.9	50.0	60.0	69.9	87.1

Poverty rates are percentages.

All poverty lines are MGA per-person per-day.

Table 4: Candidate poverty indicators

Uncertainty	
coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
1,817	What is the household's main source of lighting? (Kerosene lamp, or other; Candles, or generator;
	Electricity)
1,667	How many household members 5-years-old or older worked at least 1 hour in the past 7 days and, in their
	main occupation, were skilled farmers, agricultural laborers, and fishery workers, or unskilled
	laborers? (Five or more; Four; Three; Two; One; None)
1,660	How many household members 5-years-old or older worked at least 1 hour in the past 7 days and, in their
	main occupation, were skilled farmers, agricultural laborers, or fishery workers? (Four or more;
	Three; Two; One; None)
1,610	What is the household's main cooking fuel? (Wood, straw, sticks, grass, crop residue, dung, does not cook,
	or not relevant; Charcoal, coal/lignite, electricity, LPG, natural gas, biogas, kerosene, or other)
1,602	How many cell phones does the household have? (None; One; Two or more)
1,597	Does the household have a TV? (No; Yes)
1,531	How many household members are 14-years-old or younger? (Five or more; Four; Three; Two; One; None)
1,517	How many household members are 16-years-old or younger? (Five or more; Four; Three; Two; One; None)
1,507	How many household members are 15-years-old or younger? (Five or more; Four; Three; Two; One; None)
1,501	How many household members are 12-years-old or younger? (Four or more; Three; Two; One; None)
1,489	How many household members are 13-years-old or younger? (Four or more; Three; Two; One; None)
1,479	What is the main material of the floor? (Reeds, or dung; Earth/sand; Palm leaves/bamboo,
	linoleum/asphalt, or other; Wood planks, or carpet; Cement, parquet or smooth wood, or tile)
1,462	How many household members are 17-years-old or younger? (Five or more; Four; Three; Two; One; None)
1,456	How many household members are 18-years-old or younger? (Six or more; Five; Four; Three; Two; One;
	None)
1,447	How many household members are 11-years-old or younger? (Four or more; Three; Two; One; None)
1,398	If the (eldest) female head/spouse worked at least one hour during the past 7 days, then what did she do in
	her main occupation? (Skilled farmers, agricultural laborers, and fishery workers; Unskilled
	occupations; Does not work; Craft and related trades workers; Other)

Uncertainty								
<u>coefficient</u>	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)							
1,397	If any household members 5-years-old or older worked at least 1 hour in the past 7 days and, in their main							
	occupation, were skilled farmers, agricultural laborers, and fishery workers, then how many ares does							
	the household have of land, shoreline, or lakes? (Non-agricultural household without any; Non-							
	agricultural household with 1–2 ares; Non-agricultural household with 3–9 ares; Non-agricultural							
	household with 10–49 ares; Non-agricultural household with 50–199 ares; Non-agricultural household							
	with 200 ares ou plus; Agricultural household without any; Agricultural household with 1–2 ares;							
	Agricultural household with 3–9 ares; Agricultural household with 10–19 ares; Agricultural household							
	with 20–49 ares; Agricultural household with 50–99 ares; Agricultural household with 100 ares;							
	Agricultural household with 101–199 ares; Agricultural household with 200 ares; Agricultural							
1.000	household with 201–299 ares; Agricultural household with 300 ares or more)							
1,386	How many pure-bred cattle, non-pure-bred cattle, or dairy cattle are currently owned by household							
	members? (None (agricultural household); Three or more (agricultural household); One or two							
	(agricultural household); One or two (non-agricultural household); Three or more (non-agricultural							
1.005	household); None (non-agricultural household))							
1,385	What is the main material of the roof? (Sod, or no roof; Thatch, palm leaves, branches, reeds, bamboo,							
1.904	wood planks, or cardboard; Corrugated tin, tile, cement, shingles, wood, or zinc/fiberglass)							
1,384	If any household members 5-years-old or older worked at least one hour in the past seven days and, in their							
	main occupation, were skilled farmers, agricultural laborers, and fishery workers, then does any							
	member of the household currently own any livestock? (No (agricultural household); Yes							
1,380	(agricultural household); Yes (non-agricultural household); No (non-agricultural household)) Does any member of the household currently own any chickens, geese, turkeys/ducks, goats, sheep, or							
1,360	rabbits? (No (agricultural household); Yes (agricultural household); Yes (non-agricultural							
	household); No (non-agricultural household))							
1,379	In the past 12 months, has any member of the household done any fishing or aquaculture, including fish,							
1,979	shrimp, crabs, oysters, and so on? (No (agricultural household); Yes (agricultural household); Yes							
	(non-agricultural household); No (non-agricultural household))							
	(non-agricultural nousehold), two (non-agricultural nousehold))							

<u>Uncertainty</u>	
$\underline{\text{coefficient}}$	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
1,378	Does any member of the household currently own any chickens? (No (agricultural household); Yes
	(agricultural household); Yes (non-agricultural household); No (non-agricultural household))
1,376	Does any member of the household currently own any goats, sheep, rabbits, geese, or turkeys/ducks? (No
	(agricultural household); Yes (agricultural household); Yes (non-agricultural household); No (non-
	agricultural household))
1,371	Does any member of the household currently own any pigs? (No (agricultural household); Yes (agricultural
	household); Yes (non-agricultural household); No (non-agricultural household))
1,355	Does the household have a TV, or a radio-cassette player, hi-fi system, or CD, VCD, DVD player or other
	digital playback device? (None; Only TV; Radio-cassette player, hi-fi system, or CD, VCD, DVD
	player or other digital playback device (regardless of TV))
1,349	What is the last class the female head (or the wife (eldest) of the male head) has passed? (None, never
	attended, or pre-school/kindergarten; T1 or CP, or T2 or CE1; T3 or CE2; T4 or CM1; T5 or CM2;
	T6 or sixième, or T7 or cinquième; No femake head nor eldest wife of the male head; T8 or
	quatrième, T9 or troisième; T10 or seconde, or T11 or première, T12 or terminale, or U1 or higher)
1,272	How many chairs does the household have? (None; One; Two; Three; Four; Five or six; Seven or more)
1,229	What is the household's main source of drinking water? (Surface water (river, lake, and so on); Rainwater,
	rainwater delivered by a water truck, water truck, or water vendor; Spring (protected or not), or
	unprotected well; Protected well, hand-pump well, unprotected artesian well, or hand-pump tube
	well; Public standpipe; Tap in the yard of the residence, tap inside the residence, bottled water, or
	other)
1,173	Does the household have a radio-cassette player, hi-fi system, or CD, VCD, DVD player or other digital
	playback device? (No; Yes)
1,166	If the male head/spouse worked at least one hour during the past 7 days, then what did he do in his main
	occupation? (Skilled farmers, agricultural laborers, and fishery workers; No male head/spouse;
	Unskilled occupations; Does not work; Others)
1,145	How many household members are 6-years-old or younger? (Three or more; Two; One; None)

Uncertainty							
<u>coefficient</u>	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)						
1,123	In the past 12 months, has the household cultivated any agricultural land? (Yes; No)						
1,119	What is the last class the male head or the husband of the female head has passed? (Did not go to school,						
	none, or T1 or CP; T2 or CE1, or T3 or CE2; T4 or CM1; T5 or CM2; No male head nor husband of						
	the female head; T6 or sixième, T7 or cinquième, T8 or quatrième, T9 or troisième; T10 or seconde,						
	or higher)						
1,083	How many members does the household have? (Eight or more; Seven; Six; Five; Four; Three; Two; One)						
1,064	What is the main construction material of the outside walls? (Earth, mud-covered stones, unfinished adobe,						
	plywood, cardboard, or no walls; Bamboo/cane/palm leaves/logs; Mud-covered bamboo; Bricks,						
	wood shakes/shingles, finished adobe, or other; Scrap wood; Cement, stone with masonry, or cinder						
	blocks)						
976	How many tables does the household have? (None; One; Two or more)						
961	How many manufactured (Petromax) or home-made kerosene lamps (kapoaka) does the household have?						
	(Two or more; One; None)						
926	In the past 7 days, in how many days has the household eaten meat, fish, or eggs? (None; One; Two; Three						
	or more)						
904	What type of toilet arrangement does the household use? (No toilet arrangement/bush; Latrine without a						
	slab/open pit; Latrine with slab (washable or non-washable), composting latrine, self-aerating						
	latrine, latrine over water, flush toilet (regardless of drainage), bucket/pan, or other)						
781	Do all household members ages 7 to 14 currently attend school (attendance for more than three months)?						
	(No; Yes; No members ages 7 to 14)						
772	Do all household members ages 7 to 16 currently attend school (attendance for more than three months)?						
	(No; Yes; No members ages 7 to 16)						
769	How many household members 5-years-old or older worked for at least 1 hour in the past 7 days and, in						
	their main occupation, were unpaid family workers or unpaid interns/apprentices? (Three or more;						
	Two; One; None)						

Uncertainty						
coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)					
760	Do all household members ages 7 to 15 currently attend school (attendance for more than three months)?					
	(No; Yes; No members ages 7 to 15)					
728	Do all household members ages 7 to 13 currently attend school (attendance for more than three months)?					
	(No; Yes; No members ages 7 to 13)					
716	Do all household members ages 7 to 17 currently attend school (attendance for more than three months)?					
	(No; Yes; No members ages 7 to 17)					
712	Do all household members ages 7 to 12 currently attend school (attendance for more than three months)?					
	(No; Yes; No members ages 7 to 12)					
710	In the past 7 days, how many times has the household eaten vegetable oil or animal fat/grease? (None;					
	One; Two; Three or more)					
692	In what type of residence does the household currently live? (Traditional detached house; Studio apartment,					
	rented room, or other; Apartment, or modern detached house)					
691	Do all household members ages 7 to 18 currently attend school (attendance for more than three months)?					
	(No; Yes; No members ages 7 to 18)					
686	Do all household members ages 7 to 11 currently attend school (attendance for more than three months)?					
	(No; Yes; No members ages 7 to 11)					
666	Does any member of the household have access to internet? (No; Yes)					
664	In the past 7 days, how many times has the household eaten milk, yogurt, or other dairy products? (None;					
	One; Two; Three or more)					
662	Can the female head or the eldest spouse of the male head read a short text and write a letter? (No; Yes;					
	No female head and no wife of the male head)					
658	How many mats does the household have? (Five or more; Four; Three; Two; One; None)					

Uncertainty							
<u>coefficient</u>	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)						
649	If the (eldest) female head/spouse worked at least one hour during the past 7 days, what was her						
	occupational status? (Self-employed without employees, intern/apprentice (unpaid), or unpaid family						
	worker; Does not work; No female head/spouse; Executive (wage/salary), middle manager						
	(wage/salary), skilled wage/salary worker, unskilled wage/salary worker, laborer (wage/salary), paid						
	intern/apprentice, or business owner with employees)						
643	Did any household members 5-years-old or older work at least 1 hour in the past 7 days and, in their main						
	occupation, were wage/salary workers or business owners with employees? (No; Yes)						
638	If the male head/spouse worked at least one hour during the past 7 days, what is his occupational status?						
	(Self-employed without employees, intern/apprentice (unpaid), or unpaid family worker; No male						
	head/spouse; Unskilled wage/salary worker, laborer (wage/salary), paid intern/apprentice, or						
	business owner with employee; Does not work; Executive (wage/salary), middle manager						
	(wage/salary), or skilled wage/salary worker)						
625	How many beds does the household have? (None; One; Two; Three or more)						
577	What is the main material of the ceiling? (Packed earth, or wattle and daub; No ceiling; Bark, leaves,						
	stems or reeds; Wood (planks, plywood), cinder blocks, cement, concrete, or other)						
574	What is the tenancy status of the household in its residence? (Owned; Provided for free by an individual or						
	household, temporary housing, or other; Rented, or provided by employer)						
555	How many household members 5-years-old or older worked at least one hour in the past 7 days? (Five or						
	more; Four; Three; Two; One; None)						
525	How many household members 5-years-old or older worked at least 1 hour in the past 7 days and, in their						
	main occupation, were self-employed without employees? (Two or more; One; None)						
458	In what region does the household live? (Vakinankaratra; Androy; Analanjirofo, Melaky, Sava, or Sofia;						
	Analamanga, Anosy, Atsimo-Andrefana, Atsimo-Atsinanana, or Atsinanana; Alaotra-Mangoro,						
	Amoron'i Mania, Betsiboka, Itasy, or Menabe; Bongolava, Ihorombe, Matsiatra Ambony, or						
	Vatovavy Fitovinany; Boeny, or Diana)						
443	Did any household members attend a private school during the previous school year? (No; Yes)						

<u>Uncertainty</u>						
<u>coefficient</u>	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)					
435	Can the male head (or the husband of the female head) read a short text and write a short letter? (No male					
	head (or husband of the female head); No; Yes)					
429	Does the household have a house? (Yes; No)					
425	How many ares does the household have of land, shoreline, or lakes? (0; 1 to 2; 3 to 9; 10 to 19; 20 to 49					
	; 50 to 99; 50 to 99; 100; 101 to 199; 200; 201 to 299; 300 or more)					
390	If the male or female head/spouse worked for at least 1 hour in the past 7 days, then were either one self-					
	employed (without employees) or a business owner (with employees) in a non-agricultural activity?					
	(No; Yes)					
314	In the past 7 days, how many times has the household eaten beans, peas, lentils, nuts, or other legumes?					
	(None; One; Two; Three; Four or more)					
296	Faritany (Antananarivo; Fianarantsoa; Toamasina; Mahajanga; Toliara; Antsiranana)					
264	In the past 7 days, how many times has the household eaten sugar? (None; One; Two; Three; Four or					
	more)					
249	Did the (eldest) female head/spouse work at least one hour during the past 7 days? (Yes; No; No female					
	head/spouse)					
238	In the past 7 days, how many times has the household eaten vegetables? (None; One; Two; Three; Four or					
	more)					
224	Does the household have a private car (not counting a car for business), motorcycle/scooter, or bicycle?					
	(No; Yes)					
193	Does the household usually cook meals inside the house in a room used only as a kitchen, inside in a room					
	used as a kitchen and for other purposes, in a separate out-building, or in the open air? (Inside the					
	house but not in a room used only as a kitchen; In a separate out-building; Inside the house in a					
	room used only as a kitchen; In the open air, or other)					
174	What is the total area of the rooms used by the household for sleeping (in square meters)? (Seven or less; 8					
	to 9; 10 to 12; 13 to 15; 16 to 23; 24 or more)					

<u>Uncertainty</u>	
coefficient	Indicator (Responses ordered starting with those linked with higher poverty likelihoods)
157	Does the household head have a spouse/conjugal partner? (Male head without a spouse/conjugal partner;
	Yes; Female head without a spouse/conjugal partner)
138	Does the (eldest) female head/spouse have a disability? (Yes; No; No female head/spouse)
133	In the past 7 days, how many times has the household eaten fruit? (None; One; Two; Three; Four or more)
89	How many household members 5-years-old or older worked at least one hour in the past seven days and, in
	their main occupation, were unskilled laborers? (Two or more; One; None)
84	Does the household have a radio? (No; Yes)
76	How many rooms does the household use for sleeping? (None, or one; Two; Three or more)
59	In the past 7 days, how many times has the household eaten cereals or starchy root vegetables? (None;
	One; Two; Three; Four or more)
50	Does the household have an animal-drawn plow, wagon, or carriage? (Yes; No)
31	Did the male head/spouse work at least one hour during the past 7 days? (None; One; Two; Three; Four or
	more)
28	Do any household members have a disability? (Yes; No)
13	Does the household have any mosquito nets that can be used while sleeping? (No; Yes)
6	Does the male head/spouse have a disability? (No; Yes; No male head/spouse)

Source: 2013 ENSOMD with 100% of the World-Bank-definition national poverty line

${\bf Tables~for} \\ {\bf 100\%~of~the~World\text{-}Bank\text{-}Definition~National~Poverty~Line} \\$

Table 5 (100% of the World-Bank-definition national line):

Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

\mathbf{Sample}		Difference between	estimate and obser	rved value	
\mathbf{Size}	Confidence interval (±percentage points)				
\boldsymbol{n}	Error	r 90-percent 95-percer		nt 99-percent	
1	-0.6	66.4	79.5	92.7	
4	-1.7	30.2	36.8	49.3	
8	-1.7	23.0	28.1	36.4	
16	-1.0	16.8	20.2	28.0	
32	-1.3	11.3	13.6	18.3	
64	-0.9	8.0	9.5	12.6	
128	-0.9	5.8	7.0	8.4	
256	-1.0	4.2	4.9	6.2	
512	-1.1	2.9	3.3	4.4	
1,024	-1.1	2.0	2.4	3.2	
2,048	-1.1	1.4	1.7	2.3	
4,096	-1.1	1.0	1.2	1.5	
8,192	-1.2	0.7	0.9	1.1	
16,384	-1.2	0.5	0.6	0.8	

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (100% of the World-Bank-definition national line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\overline{\text{mistakenly}}$	correctly	+
$\operatorname{\mathbf{cut}}$ -off	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	5.0	57.2	0.0	37.9	42.8
<=27	10.6	51.5	0.1	37.7	48.4
<=29	13.9	48.2	0.3	37.6	51.5
<=32	19.4	42.8	0.6	37.3	56.7
<=34	23.4	38.8	0.8	37.1	60.4
<=36	27.4	34.7	1.1	36.8	64.2
<=38	31.2	30.9	1.5	36.4	67.6
<=40	35.5	26.6	1.9	36.0	71.5
<=42	39.1	23.0	2.7	35.2	74.3
<=44	42.6	19.5	3.7	34.2	76.7
<=46	46.0	16.1	4.8	33.0	79.0
<=48	48.8	13.3	6.3	31.6	80.3
<=50	51.3	10.8	7.8	30.0	81.4
<=52	53.9	8.2	9.6	28.3	82.2
<=54	55.8	6.3	11.8	26.1	81.9
<=56	57.6	4.5	14.0	23.9	81.5
<=59	59.2	2.9	17.6	20.3	79.5
<=62	60.2	1.9	21.3	16.6	76.8
<=65	61.0	1.1	25.0	12.9	73.8
<=68	61.3	0.8	29.0	8.9	70.3
<=73	61.8	0.3	33.4	4.5	66.3
<=100	62.1	0.0	37.9	0.0	62.1

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (100% of the World-Bank-definition national line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Targeting	% all HHs who are	% targeted HHs who are	% poor HHs who are	Poor HHs targeted per
cut-off	targeted	poor	targeted	non-poor HH targeted
<=22	5.0	99.4	8.0	173.8:1
<=27	10.8	98.7	17.1	78.1:1
<=29	14.2	98.0	22.4	47.8:1
<=32	19.9	97.2	31.2	34.7:1
<=34	24.2	96.6	37.6	28.4:1
<=36	28.5	96.2	44.1	25.1:1
<=38	32.7	95.5	50.2	21.3:1
<=40	37.3	95.0	57.1	18.9:1
<=42	41.9	93.5	63.0	14.4:1
<=44	46.3	92.0	68.5	11.4:1
<=46	50.8	90.5	74.0	9.5:1
<=48	55.1	88.5	78.5	7.7:1
<=50	59.2	86.7	82.6	6.5:1
<=52	63.5	84.8	86.8	5.6:1
<=54	67.6	82.6	89.9	4.7:1
<=56	71.5	80.5	92.7	4.1:1
< = 59	76.8	77.1	95.3	3.4:1
<=62	81.5	73.9	96.9	2.8:1
<=65	86.0	70.9	98.2	2.4:1
<=68	90.3	67.9	98.7	2.1:1
< = 73	95.2	64.9	99.5	1.9:1
<=100	100.0	62.1	100.0	1.6:1

Scorecard applied to the validation sample.

Tables for the World-Bank-Definition Food Poverty Line

Table 5 (World-Bank-definition food line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between	estimate and obser	ved value		
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	or 90-percent 95-percent		99-percent		
1	-1.3	66.9	80.8	90.4		
4	-1.3	33.3	39.4	49.3		
8	-1.0	24.8	29.6	39.5		
16	-1.0	17.5	19.9	26.5		
32	-1.3	11.9	14.3	20.2		
64	-1.1	8.5	10.1	13.5		
128	-1.1	6.1	7.2	9.4		
256	-1.0	4.4	5.3	6.8		
512	-1.0	3.0	3.6	4.5		
1,024	-1.0	2.1	2.5	3.3		
2,048	-1.0	1.5	1.8	2.3		
4,096	-1.1	1.0	1.2	1.6		
8,192	-1.1	0.7	0.9	1.2		
16,384	-1.1	0.5	0.6	0.8		

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (World-Bank-definition food line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

,	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.8	43.1	0.1	51.9	56.7
<=27	10.4	37.6	0.4	51.7	62.0
<=29	13.5	34.5	0.7	51.3	64.8
<=32	18.3	29.7	1.6	50.4	68.7
<=34	21.8	26.2	2.4	49.6	71.4
<=36	25.1	22.8	3.3	48.7	73.9
<=38	28.1	19.9	4.6	47.5	75.6
<=40	31.5	16.4	5.8	46.2	77.8
<=42	34.3	13.6	7.5	44.5	78.9
<=44	36.7	11.3	9.6	42.4	79.1
<=46	39.2	8.8	11.6	40.4	79.6
<=48	40.8	7.1	14.3	37.8	78.6
<=50	42.5	5.4	16.7	35.4	77.9
<=52	43.9	4.1	19.7	32.4	76.3
<=54	44.9	3.0	22.7	29.4	74.3
<=56	45.9	2.0	25.6	26.4	72.3
<=59	46.8	1.2	30.0	22.0	68.8
<=62	47.2	0.8	34.3	17.8	64.9
<=65	47.5	0.4	38.4	13.6	61.1
<=68	47.7	0.2	42.6	9.5	57.2
<=73	47.9	0.0	47.3	4.7	52.6
<=100	48.0	0.0	52.0	0.0	48.0

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (World-Bank-definition food line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	who are	HHs who are	who are	non-poor HH targeted
cut-off	$__$ targeted	poor	$_$ targeted	mon-poor IIII targeted
<=22	5.0	97.1	10.1	33.5:1
<=27	10.8	96.4	21.7	27.1:1
<=29	14.2	94.9	28.1	18.7:1
<=32	19.9	91.9	38.2	11.4:1
< = 34	24.2	90.0	45.4	9.0:1
<=36	28.5	88.3	52.4	7.6:1
<=38	32.7	86.0	58.6	6.2:1
<=40	37.3	84.4	65.8	5.4:1
< = 42	41.9	82.0	71.6	4.6:1
<=44	46.3	79.2	76.5	3.8:1
<=46	50.8	77.1	81.7	3.4:1
<=48	55.1	74.1	85.2	2.9:1
<=50	59.2	71.8	88.6	2.5:1
< = 52	63.5	69.1	91.5	2.2:1
< = 54	67.6	66.5	93.7	2.0:1
< = 56	71.5	64.2	95.8	1.8:1
< = 59	76.8	60.9	97.5	1.6:1
<=62	81.5	57.9	98.4	1.4:1
<=65	86.0	55.3	99.1	1.2:1
<=68	90.3	52.8	99.5	1.1:1
<=73	95.2	50.3	99.9	1.0:1
<=100	100.0	48.0	100.0	0.9:1

Scorecard applied to the validation sample.

${\bf Tables~for} \\ {\bf 150\%~of~the~World\text{-}Bank\text{-}Definition~National~Poverty~Line} \\$

Table 5 (150% of the World-Bank-definition national line):

Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample	Sample Difference between estimate and observed value						
\mathbf{Size}		Confidence interval (±percentage points)					
n	Error	90-percent	95-percent	99-percent			
1	+0.4	59.1	70.6	83.7			
4	0.0	26.5	33.3	43.7			
8	-0.1	19.5	23.2	29.7			
16	+0.2	13.5	16.1	21.1			
32	+0.1	9.8	11.8	14.8			
64	+0.2	7.0	8.5	11.0			
128	+0.1	4.8	5.9	8.2			
256	+0.1	3.4	4.1	5.3			
512	0.0	2.5	2.9	3.9			
1,024	0.0	1.8	2.1	2.7			
2,048	0.0	1.2	1.4	2.1			
4,096	0.0	0.9	1.1	1.3			
8,192	0.0	0.6	0.7	1.0			
16,384	0.0	0.4	0.5	0.7			

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (150% of the World-Bank-definition national line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	74.9	0.0	20.1	25.1
<=27	10.8	69.1	0.0	20.1	30.8
<=29	14.2	65.7	0.0	20.0	34.2
<=32	19.9	60.1	0.0	20.0	39.9
<=34	24.1	55.8	0.1	20.0	44.1
<=36	28.4	51.6	0.1	20.0	48.4
<=38	32.5	47.4	0.2	19.9	52.4
<=40	37.1	42.8	0.3	19.8	56.9
<=42	41.5	38.4	0.3	19.7	61.3
<=44	45.8	34.1	0.5	19.6	65.4
<=46	50.2	29.7	0.6	19.5	69.7
<=48	54.2	25.7	0.9	19.2	73.4
<=50	57.9	22.0	1.3	18.8	76.7
<=52	61.8	18.1	1.7	18.4	80.2
<=54	65.2	14.7	2.4	17.7	82.9
<=56	68.3	11.6	3.2	16.9	85.2
<=59	71.9	8.0	4.9	15.2	87.1
<=62	74.4	5.5	7.0	13.0	87.5
<=65	76.5	3.4	9.5	10.6	87.1
<=68	78.0	1.9	12.3	7.8	85.8
<=73	79.3	0.6	15.9	4.2	83.6
<=100	79.9	0.0	20.1	0.0	79.9

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (150% of the World-Bank-definition national line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs % targeted		% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	who are	HHs who are	who are	non-poor HH targeted
<=22	$\frac{\mathbf{targeted}}{5.0}$	<u>poor</u> 100.0	$\frac{\mathbf{targeted}}{6.2}$	Only poor torgated
				Only poor targeted
<=27	10.8	99.9	13.5	1,425.3:1
<=29	14.2	99.7	17.7	304.4:1
<=32	19.9	99.8	24.9	426.7:1
<=34	24.2	99.7	30.2	303.8:1
<=36	28.5	99.7	35.5	295.0:1
<=38	32.7	99.5	40.7	214.4:1
<=40	37.3	99.3	46.4	140.6:1
<=42	41.9	99.2	52.0	118.7:1
<=44	46.3	98.9	57.3	93.8:1
<=46	50.8	98.8	62.8	81.9:1
<=48	55.1	98.4	67.8	60.0:1
<=50	59.2	97.9	72.5	45.8:1
<=52	63.5	97.4	77.4	36.8:1
<=54	67.6	96.4	81.6	27.0:1
<=56	71.5	95.5	85.5	21.2:1
<=59	76.8	93.6	90.0	14.7:1
<=62	81.5	91.4	93.1	10.6:1
<=65	86.0	89.0	95.7	8.1:1
<=68	90.3	86.4	97.6	6.3:1
<=73	95.2	83.3	99.3	5.0:1
<=100	100.0	79.9	100.0	4.0:1

Scorecard applied to the validation sample.

${\bf Tables~for} \\ {\bf 200\%~of~the~World\text{-}Bank\text{-}Definition~National~Poverty~Line} \\$

Table 5 (200% of the World-Bank-definition national line):

Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value					
\mathbf{Size}		$\underline{\text{Confidence interval } (\pm \text{percentage points})}$					
n	Error	90-percent	95-percent	99-percent			
1	-0.3	43.2	64.1	82.6			
4	-0.1	23.6	29.9	40.7			
8	-0.2	15.8	19.4	26.9			
16	+0.1	11.0	13.6	18.3			
32	0.0	8.0	10.0	12.5			
64	-0.1	5.8	7.1	8.8			
128	0.0	4.2	5.0	6.8			
256	-0.1	3.0	3.6	4.5			
512	-0.1	2.0	2.5	3.2			
1,024	-0.1	1.5	1.8	2.3			
2,048	0.0	1.0	1.2	1.6			
4,096	0.0	0.7	0.9	1.2			
8,192	0.0	0.5	0.6	0.8			
16,384	0.0	0.4	0.4	0.5			

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (200% of the World-Bank-definition national line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	83.4	0.0	11.6	16.6
<=27	10.8	77.6	0.0	11.6	22.4
<=29	14.2	74.2	0.0	11.6	25.8
<=32	19.9	68.5	0.0	11.6	31.5
<=34	24.2	64.2	0.0	11.6	35.7
<=36	28.4	60.0	0.0	11.6	40.0
<=38	32.6	55.8	0.1	11.5	44.1
<=40	37.2	51.1	0.1	11.5	48.8
<=42	41.7	46.6	0.1	11.5	53.2
<=44	46.1	42.3	0.2	11.5	57.6
<=46	50.6	37.8	0.2	11.4	62.0
<=48	54.8	33.6	0.3	11.3	66.2
<=50	58.8	29.6	0.4	11.3	70.1
<=52	63.0	25.3	0.5	11.1	74.2
<=54	67.0	21.4	0.6	11.0	78.0
< = 56	70.6	17.8	0.9	10.7	81.3
<=59	75.3	13.1	1.5	10.1	85.4
<=62	79.1	9.3	2.4	9.2	88.3
<=65	82.3	6.1	3.7	7.9	90.2
<=68	84.9	3.5	5.4	6.3	91.2
<=73	87.2	1.2	8.0	3.6	90.8
<=100	88.4	0.0	11.6	0.0	88.4

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (200% of the World-Bank-definition national line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

_	% all HHs % targeted		% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	$\underline{\hspace{1cm}}$ targeted	poor	$__$ targeted	
<=22	5.0	100.0	5.6	Only poor targeted
<=27	10.8	99.9	12.2	$1,\!425.3:1$
<=29	14.2	99.8	16.1	559.2:1
<=32	19.9	99.9	22.5	783.5:1
<=34	24.2	99.9	27.3	951.8:1
<=36	28.5	99.9	32.2	673.7:1
<=38	32.7	99.8	36.9	410.6:1
<=40	37.3	99.7	42.1	384.3:1
<=42	41.9	99.7	47.2	342.7:1
<=44	46.3	99.7	52.2	285.5:1
< = 46	50.8	99.6	57.3	254.6:1
<=48	55.1	99.5	62.0	199.6:1
<=50	59.2	99.4	66.6	166.1:1
<=52	63.5	99.2	71.3	129.5:1
<=54	67.6	99.1	75.8	110.9:1
<=56	71.5	98.7	79.9	77.3:1
< = 59	76.8	98.0	85.2	49.4:1
<=62	81.5	97.0	89.5	32.9:1
<=65	86.0	95.7	93.1	22.4:1
<=68	90.3	94.1	96.1	15.9:1
< = 73	95.2	91.6	98.6	10.9:1
<=100	100.0	88.4	100.0	7.6:1

Scorecard applied to the validation sample.

${\bf Tables~for} \\ {\bf the~World\text{-}Bank\text{-}Definition~\$1.25/day~2005~PPP~Poverty~Line} \\$

Table 5 (World-Bank-definition \$1.25/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample	Sample Difference between estimate and observed value						
\mathbf{Size}		Confidence interval (\pm percentage points)					
n	Error	90-percent	95-percent	99-percent			
1	-0.3	58.4	71.0	84.5			
4	-0.4	26.9	33.7	45.2			
8	-0.4	20.0	23.8	32.0			
16	-0.1	13.8	16.8	22.1			
32	-0.1	9.8	12.0	15.2			
64	-0.1	7.1	8.8	11.2			
128	-0.2	4.8	6.0	8.6			
256	-0.2	3.5	4.3	5.3			
512	-0.3	2.5	2.9	3.7			
1,024	-0.3	1.8	2.1	2.8			
2,048	-0.3	1.3	1.5	2.0			
4,096	-0.3	0.9	1.0	1.4			
8,192	-0.3	0.6	0.8	1.0			
16,384	-0.3	0.4	0.5	0.7			

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (World-Bank-definition \$1.25/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	mistakenly	$\stackrel{ ext{mistakenly}}{ ext{mistakenly}}$	correctly	+
cut-off	$\operatorname{targeted}$	not targeted	targeted	not targeted	Exclusion
<=22	5.0	74.1	0.0	21.0	25.9
<=27	10.8	68.3	0.0	20.9	31.7
<=29	14.2	64.9	0.0	20.9	35.1
<=32	19.9	59.2	0.0	20.9	40.8
<=34	24.1	54.9	0.1	20.9	45.0
<=36	28.4	50.7	0.1	20.8	49.2
<=38	32.5	46.6	0.2	20.8	53.3
<=40	37.1	42.0	0.3	20.7	57.8
<=42	41.5	37.5	0.4	20.6	62.1
<=44	45.7	33.3	0.5	20.4	66.2
<=46	50.1	28.9	0.7	20.3	70.4
<=48	54.1	25.0	1.0	19.9	74.0
<=50	57.8	21.3	1.4	19.5	77.3
<=52	61.6	17.4	1.9	19.0	80.7
<=54	64.9	14.1	2.7	18.3	83.2
<=56	68.0	11.0	3.5	17.4	85.4
<=59	71.5	7.6	5.3	15.6	87.1
<=62	73.9	5.2	7.6	13.4	87.2
<=65	75.8	3.2	10.2	10.8	86.6
<=68	77.2	1.9	13.1	7.9	85.1
<=73	78.5	0.5	16.7	4.3	82.8
<=100	79.0	0.0	21.0	0.0	79.0

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (World-Bank-definition \$1.25/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Targeting	% all HHs who are	% targeted HHs who are	% poor HHs who are	Poor HHs targeted per
cut-off	targeted	poor	targeted	non-poor HH targeted
<=22	5.0	100.0	6.3	Only poor targeted
<=27	10.8	99.9	13.6	1,425.3:1
<=29	14.2	99.7	17.9	304.4:1
<=32	19.9	99.8	25.1	426.7:1
<=34	24.2	99.7	30.5	303.8:1
<=36	28.5	99.6	35.9	271.2:1
<=38	32.7	99.5	41.1	203.0:1
<=40	37.3	99.3	46.9	136.2:1
<=42	41.9	99.1	52.5	115.9:1
<=44	46.3	98.8	57.9	83.5:1
<=46	50.8	98.7	63.4	73.4:1
<=48	55.1	98.2	68.4	53.7:1
<=50	59.2	97.6	73.1	40.4:1
<=52	63.5	97.0	78.0	32.4:1
<=54	67.6	96.0	82.2	24.2:1
<=56	71.5	95.1	86.0	19.2:1
<=59	76.8	93.0	90.4	13.4:1
<=62	81.5	90.7	93.5	9.7:1
<=65	86.0	88.2	95.9	7.5:1
<=68	90.3	85.5	97.7	5.9:1
<=73	95.2	82.5	99.3	4.7:1
<=100	100.0	79.0	100.0	3.8:1

Scorecard applied to the validation sample.

${\bf Tables~for}$ the World-Bank-Definition ${\bf \$2.00/day~2005~PPP~Poverty~Line}$

Table 5 (World-Bank-definition \$2.00/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample	mple Difference between estimate and observed value						
\mathbf{Size}		Confidence interval (±percentage points)					
n	Error	90-percent	95-percent	99-percent			
1	-0.3	46.8	56.3	80.0			
4	0.0	20.3	27.8	39.2			
8	-0.4	14.0	17.3	24.5			
16	0.0	10.0	12.0	16.2			
32	0.0	7.2	8.2	10.4			
64	0.0	5.1	5.9	8.3			
128	+0.1	3.8	4.6	6.2			
256	+0.1	2.7	3.2	4.2			
512	0.0	1.8	2.2	2.9			
1,024	+0.1	1.4	1.6	2.0			
2,048	+0.1	0.9	1.1	1.4			
4,096	+0.1	0.7	0.8	1.1			
8,192	+0.1	0.5	0.6	0.7			
16,384	+0.1	0.3	0.4	0.5			

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (World-Bank-definition \$2.00/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	86.4	0.0	8.6	13.6
<=27	10.8	80.6	0.0	8.6	19.4
<=29	14.2	77.2	0.0	8.6	22.8
<=32	19.9	71.5	0.0	8.6	28.5
<=34	24.2	67.2	0.0	8.6	32.7
<=36	28.4	63.0	0.0	8.6	37.0
<=38	32.6	58.8	0.0	8.6	41.2
<=40	37.3	54.1	0.0	8.6	45.9
<=42	41.8	49.6	0.1	8.6	50.4
<=44	46.2	45.2	0.1	8.5	54.7
<=46	50.7	40.7	0.1	8.5	59.2
<=48	55.0	36.4	0.1	8.5	63.4
<=50	59.0	32.4	0.2	8.4	67.4
<=52	63.2	28.2	0.3	8.3	71.5
< = 54	67.3	24.1	0.4	8.2	75.5
<=56	71.0	20.3	0.5	8.1	79.1
<=59	76.0	15.4	0.8	7.8	83.7
<=62	80.0	11.3	1.4	7.2	87.2
<=65	83.8	7.6	2.2	6.4	90.2
<=68	87.0	4.4	3.3	5.3	92.2
<=73	89.7	1.6	5.5	3.1	92.9
<=100	91.4	0.0	8.6	0.0	91.4

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (World-Bank-definition \$2.00/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Targeting	% all HHs who are	% targeted HHs who are	% poor HHs who are	Poor HHs targeted per	
cut-off	targeted	poor	targeted	non-poor HH targeted	
<=22	5.0	100.0	5.5	Only poor targeted	
<=27	10.8	99.9	11.8	1,425.3:1	
<=29	14.2	99.8	15.5	559.2:1	
<=32	19.9	99.9	21.8	783.5:1	
<=34	24.2	99.9	26.4	951.8:1	
<=36	28.5	99.9	31.1	825.3:1	
<=38	32.7	99.9	35.7	947.1:1	
<=40	37.3	99.9	40.8	857.8:1	
<=42	41.9	99.9	45.8	704.6:1	
<=44	46.3	99.8	50.6	571.2:1	
<=46	50.8	99.8	55.5	429.2:1	
<=48	55.1	99.7	60.1	383.0:1	
<=50	59.2	99.6	64.5	264.5:1	
<=52	63.5	99.5	69.2	205.9:1	
<=54	67.6	99.5	73.6	181.4:1	
<=56	71.5	99.3	77.7	139.9:1	
<=59	76.8	98.9	83.1	89.9:1	
<=62	81.5	98.2	87.6	56.1:1	
<=65	86.0	97.5	91.7	38.3:1	
<=68	90.3	96.3	95.2	26.1:1	
<=73	95.2	94.2	98.2	16.4:1	
<=100	100.0	91.4	100.0	10.6:1	

Scorecard applied to the validation sample.

Tables for the World-Bank-Definition $\$2.50/\mathrm{day}\ 2005$ PPP Poverty Line

Table 5 (World-Bank-definition \$2.50/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	$95 ext{-percent}$	99-percent		
1	-0.2	12.4	43.8	72.0		
4	-0.2	17.5	22.0	35.1		
8	-0.4	11.8	16.1	22.1		
16	-0.1	8.4	10.1	14.0		
32	-0.2	5.9	7.0	9.5		
64	-0.1	4.2	5.2	7.0		
128	-0.1	3.1	3.8	5.4		
256	-0.1	2.1	2.6	3.5		
512	-0.1	1.5	1.8	2.4		
1,024	-0.1	1.1	1.3	1.7		
2,048	0.0	0.8	0.9	1.3		
4,096	0.0	0.6	0.7	0.8		
8,192	0.0	0.4	0.5	0.6		
16,384	0.0	0.3	0.3	0.5		

Scorecard applied to 1,000 bootstraps from the validation sample.

Table 6 (World-Bank-definition \$2.50/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	90.0	0.0	5.0	10.0
<=27	10.8	84.3	0.0	5.0	15.7
<=29	14.2	80.8	0.0	5.0	19.2
<=32	19.9	75.1	0.0	5.0	24.9
<=34	24.2	70.9	0.0	5.0	29.1
<=36	28.4	66.6	0.0	5.0	33.4
<=38	32.6	62.4	0.0	5.0	37.6
<=40	37.3	57.7	0.0	5.0	42.3
<=42	41.8	53.2	0.0	4.9	46.8
<=44	46.2	48.8	0.1	4.9	51.2
<=46	50.7	44.3	0.1	4.9	55.6
<=48	55.0	40.0	0.1	4.9	59.9
<=50	59.1	35.9	0.1	4.9	64.0
<=52	63.4	31.6	0.1	4.9	68.3
<=54	67.5	27.5	0.1	4.9	72.4
<=56	71.4	23.6	0.2	4.8	76.2
<=59	76.6	18.5	0.2	4.7	81.3
<=62	80.9	14.1	0.5	4.4	85.4
<=65	85.1	9.9	0.9	4.1	89.2
<=68	88.9	6.1	1.4	3.6	92.5
<=73	92.6	2.4	2.6	2.4	95.0
<=100	95.0	0.0	5.0	0.0	95.0

Inclusion, undercoverage, leakage, and exclusion normalized to sum to 100. Scorecard applied to the validation sample.

Table 7 (World-Bank-definition \$2.50/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

_	% all HHs	% targeted HHs who are poor	% poor HHs	Poor HHs targeted per non-poor HH targeted	
${f Targeting}$	who are		who are		
cut-off	$\underline{\hspace{1cm}}$ targeted		$__$ targeted		
<=22	5.0	100.0	5.3	Only poor targeted	
<=27	10.8	99.9	11.3	$1,\!425.3:1$	
<=29	14.2	99.9	15.0	1,881.0:1	
<=32	19.9	100.0	20.9	2,634.6:1	
<=34	24.2	100.0	25.4	$3,\!200.0:1$	
<=36	28.5	99.9	29.9	1,711.6:1	
<=38	32.7	99.9	34.3	1,964.2:1	
< = 40	37.3	100.0	39.3	$2,\!246.5:1$	
< = 42	41.9	99.9	44.0	$1,\!288.7:1$	
< = 44	46.3	99.9	48.7	855.7:1	
<=46	50.8	99.9	53.4	779.1:1	
<=48	55.1	99.9	57.9	845.1:1	
<=50	59.2	99.9	62.2	766.6:1	
<=52	63.5	99.9	66.8	734.9:1	
<=54	67.6	99.9	71.1	782.5:1	
< = 56	71.5	99.8	75.1	445.3:1	
< = 59	76.8	99.7	80.6	311.5:1	
<=62	81.5	99.3	85.2	151.2:1	
<=65	86.0	99.0	89.6	96.8:1	
<=68	90.3	98.5	93.6	64.7:1	
<=73	95.2	97.3	97.5	35.9:1	
<=100	100.0	95.0	100.0	19.1:1	

Scorecard applied to the validation sample.

${\bf Tables~for} \\ {\bf the~World\text{-}Bank\text{-}Definition~\$5.00/day~2005~PPP~Poverty~Line} \\$

Table 5 (World-Bank-definition \$5.00/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	-0.1	1.8	4.1	50.0		
4	0.0	1.3	7.0	20.7		
8	+0.2	4.1	7.3	13.4		
16	+0.1	3.7	5.5	7.2		
32	+0.1	3.1	3.5	4.7		
64	+0.2	1.8	2.3	3.4		
128	+0.2	1.5	1.7	2.3		
256	+0.2	1.1	1.3	1.6		
512	+0.2	0.7	0.8	1.1		
1,024	+0.2	0.5	0.6	0.8		
2,048	+0.1	0.4	0.4	0.5		
4,096	+0.1	0.3	0.3	0.4		
8,192	+0.2	0.2	0.2	0.3		
16,384	+0.2	0.1	0.2	0.2		

Table 6 (World-Bank-definition \$5.00/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	Leakage:	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	94.2	0.0	0.8	5.8
<=27	10.8	88.4	0.0	0.8	11.6
<=29	14.2	85.0	0.0	0.8	15.0
<=32	19.9	79.3	0.0	0.8	20.7
<=34	24.2	75.0	0.0	0.8	25.0
<=36	28.5	70.7	0.0	0.8	29.3
<=38	32.7	66.5	0.0	0.8	33.5
<=40	37.3	61.8	0.0	0.8	38.2
<=42	41.9	57.3	0.0	0.8	42.7
<=44	46.3	52.9	0.0	0.8	47.1
<=46	50.8	48.4	0.0	0.8	51.6
<=48	55.1	44.1	0.0	0.8	55.9
<=50	59.2	40.0	0.0	0.8	60.0
<=52	63.5	35.7	0.0	0.8	64.3
<=54	67.6	31.6	0.0	0.8	68.4
<=56	71.5	27.6	0.0	0.8	72.4
<=59	76.8	22.4	0.0	0.8	77.6
<=62	81.5	17.7	0.0	0.8	82.3
<=65	86.0	13.2	0.0	0.8	86.8
<=68	90.2	9.0	0.1	0.7	90.9
<=73	94.9	4.3	0.3	0.5	95.5
<=100	99.2	0.0	0.8	0.0	99.2

Table 7 (World-Bank-definition \$5.00/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	who are	HHs who are	who are	non-poor HH targeted
<=22	$\frac{\mathbf{targeted}}{5.0}$		$\frac{\mathbf{targeted}}{5.0}$	Only poor targeted
<=22 <=27	10.8		10.9	, <u>,</u>
		100.0		Only poor targeted
<=29	14.2	100.0	14.3	Only poor targeted
<=32	19.9	100.0	20.1	Only poor targeted
<=34	24.2	100.0	24.4	Only poor targeted
<=36	28.5	100.0	28.7	Only poor targeted
<=38	32.7	100.0	32.9	Only poor targeted
<=40	37.3	100.0	37.7	Only poor targeted
< = 42	41.9	100.0	42.2	Only poor targeted
<=44	46.3	100.0	46.7	Only poor targeted
<=46	50.8	100.0	51.2	Only poor targeted
<=48	55.1	100.0	55.5	Only poor targeted
<=50	59.2	100.0	59.7	Only poor targeted
<=52	63.5	100.0	64.0	30,835.9:1
<=54	67.6	100.0	68.2	32,830.0:1
<=56	71.5	100.0	72.1	34,731.8:1
<=59	76.8	100.0	77.4	18,641.6:1
<=62	81.5	100.0	82.1	13,182.6:1
<=65	86.0	100.0	86.7	4,818.5:1
<=68	90.3	99.9	90.9	1,157.4:1
<=73	95.2	99.7	95.7	336.5:1
<=100	100.0	99.2	100.0	121.7:1

Tables for the World-Bank-Definition $\$8.44/\mathrm{day}\ 2005\ \mathrm{PPP}\ \mathrm{Poverty}\ \mathrm{Line}$

Table 5 (World-Bank-definition \$8.44/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	0.0	1.2	3.4	26.7		
4	0.0	1.1	1.4	17.6		
8	0.0	0.8	6.1	10.4		
16	0.0	2.8	4.1	6.9		
32	+0.1	2.2	3.2	4.5		
64	+0.1	1.6	1.9	2.9		
128	+0.1	1.3	1.5	1.8		
256	+0.1	0.9	1.1	1.4		
512	+0.1	0.6	0.7	0.9		
1,024	+0.1	0.4	0.5	0.7		
2,048	+0.1	0.3	0.4	0.5		
4,096	+0.1	0.2	0.3	0.3		
8,192	+0.1	0.2	0.2	0.2		
16,384	+0.1	0.1	0.1	0.2		

Table 6 (World-Bank-definition \$8.44/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\overline{ ext{mistakenly}}$	correctly	+
cut-off	targeted	not targeted	targeted	not targeted	Exclusion
<=22	5.0	94.4	0.0	0.7	5.6
<=27	10.8	88.6	0.0	0.7	11.4
<=29	14.2	85.1	0.0	0.7	14.9
<=32	19.9	79.4	0.0	0.7	20.6
<=34	24.2	75.2	0.0	0.7	24.8
<=36	28.5	70.9	0.0	0.7	29.1
<=38	32.7	66.7	0.0	0.7	33.3
<=40	37.3	62.0	0.0	0.7	38.0
<=42	41.9	57.5	0.0	0.7	42.5
<=44	46.3	53.1	0.0	0.7	46.9
<=46	50.8	48.5	0.0	0.7	51.5
<=48	55.1	44.3	0.0	0.7	55.7
<=50	59.2	40.2	0.0	0.7	59.8
<=52	63.5	35.8	0.0	0.6	64.2
<=54	67.6	31.7	0.0	0.6	68.3
<=56	71.5	27.8	0.0	0.6	72.2
<=59	76.8	22.5	0.0	0.6	77.4
<=62	81.5	17.9	0.0	0.6	82.1
<=65	86.0	13.4	0.0	0.6	86.6
<=68	90.2	9.1	0.1	0.6	90.8
<=73	95.0	4.4	0.2	0.4	95.4
<=100	99.3	0.0	0.7	0.0	99.3

Table 7 (World-Bank-definition \$8.44/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	$_$ targeted	poor	$_$ targeted	
<=22	5.0	100.0	5.0	Only poor targeted
<=27	10.8	100.0	10.8	Only poor targeted
<=29	14.2	100.0	14.3	Only poor targeted
<=32	19.9	100.0	20.0	Only poor targeted
<=34	24.2	100.0	24.3	Only poor targeted
<=36	28.5	100.0	28.6	Only poor targeted
<=38	32.7	100.0	32.9	Only poor targeted
< = 40	37.3	100.0	37.6	Only poor targeted
< = 42	41.9	100.0	42.1	Only poor targeted
<=44	46.3	100.0	46.6	Only poor targeted
<=46	50.8	100.0	51.1	Only poor targeted
<=48	55.1	100.0	55.5	Only poor targeted
<=50	59.2	100.0	59.6	Only poor targeted
<=52	63.5	100.0	63.9	30,835.9:1
<=54	67.6	100.0	68.1	32,830.0:1
<=56	71.5	100.0	72.0	34,731.8:1
< = 59	76.8	100.0	77.3	18,641.6:1
<=62	81.5	100.0	82.0	13,182.6:1
<=65	86.0	100.0	86.5	4,818.5:1
<=68	90.3	99.9	90.8	1,157.4:1
<=73	95.2	99.7	95.6	393.4:1
<=100	100.0	99.3	100.0	152.5:1

${\bf Tables~for}$ the World-Bank-Definition \$1.90/day 2011 PPP Poverty Line

Table 5 (World-Bank-definition \$1.90/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	e interval (±percent	age points)		
n	Error	90-percent	95-percent	99-percent		
1	+0.1	66.4	79.1	90.6		
4	-0.6	29.4	36.2	50.3		
8	-0.4	22.6	27.3	35.1		
16	+0.1	15.8	18.8	27.8		
32	-0.3	11.1	12.9	17.2		
64	-0.1	7.6	9.1	12.2		
128	-0.1	5.4	6.5	8.3		
256	-0.2	3.9	4.8	6.2		
512	-0.2	2.6	3.1	4.3		
1,024	-0.2	1.9	2.3	3.0		
2,048	-0.3	1.4	1.6	2.0		
4,096	-0.3	0.9	1.1	1.6		
8,192	-0.3	0.7	0.8	1.1		
16,384	-0.3	0.5	0.6	0.7		

Table 6 (World-Bank-definition \$1.90/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	65.5	0.0	29.5	34.5
<=27	10.7	59.7	0.0	29.5	40.2
<=29	14.1	56.4	0.1	29.4	43.5
<=32	19.7	50.7	0.2	29.3	49.1
<=34	23.8	46.6	0.3	29.2	53.0
<=36	28.0	42.4	0.4	29.1	57.1
<=38	32.0	38.5	0.6	28.9	60.9
<=40	36.5	34.0	0.9	28.7	65.1
<=42	40.5	30.0	1.4	28.2	68.6
<=44	44.4	26.0	1.9	27.7	72.1
<=46	48.4	22.1	2.4	27.1	75.5
<=48	51.9	18.6	3.2	26.3	78.2
<=50	55.0	15.5	4.2	25.3	80.3
<=52	58.2	12.2	5.3	24.3	82.5
<=54	60.9	9.6	6.8	22.8	83.6
<=56	63.4	7.1	8.2	21.3	84.7
< = 59	65.7	4.8	11.2	18.4	84.0
<=62	67.3	3.2	14.2	15.3	82.6
<=65	68.5	2.0	17.5	12.0	80.5
<=68	69.3	1.2	21.0	8.6	77.9
<=73	70.1	0.4	25.1	4.4	74.5
<=100	70.5	0.0	29.5	0.0	70.5

Table 7 (World-Bank-definition \$1.90/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
$\underline{ ext{cut-off}}$	$__$ targeted	poor	$__$ targeted	
<=22	5.0	99.4	7.0	173.8:1
<=27	10.8	99.6	15.2	229.8:1
<=29	14.2	99.2	20.0	117.4:1
<=32	19.9	99.1	28.0	106.2:1
<=34	24.2	98.6	33.8	71.0:1
<=36	28.5	98.5	39.8	64.2:1
<=38	32.7	98.0	45.4	49.4:1
<=40	37.3	97.6	51.7	41.5:1
<=42	41.9	96.7	57.5	29.3:1
<=44	46.3	96.0	63.0	23.8:1
<=46	50.8	95.3	68.7	20.2:1
<=48	55.1	94.1	73.6	16.1:1
<=50	59.2	92.9	78.0	13.1:1
<=52	63.5	91.7	82.7	11.0:1
<=54	67.6	90.0	86.4	9.0:1
<=56	71.5	88.5	89.9	7.7:1
<=59	76.8	85.5	93.2	5.9:1
<=62	81.5	82.6	95.4	4.7:1
<=65	86.0	79.7	97.2	3.9:1
<=68	90.3	76.8	98.4	3.3:1
<=73	95.2	73.6	99.4	2.8:1
<=100	100.0	70.5	100.0	2.4:1

${\bf Tables~for} \\ {\bf the~World\text{-}Bank\text{-}Definition~\$3.20/day~2011~PPP~Poverty~Line} \\$

Table 5 (World-Bank-definition \$3.20/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

\mathbf{Sample}		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	e interval (±percent	age points)		
n	Error	90-percent	95-percent	99-percent		
1	-0.2	43.3	64.1	82.6		
4	0.0	23.6	29.9	40.7		
8	-0.2	15.8	19.4	26.9		
16	+0.1	11.0	13.6	18.3		
32	0.0	8.0	10.0	12.5		
64	-0.1	5.8	7.1	8.8		
128	0.0	4.2	5.0	6.8		
256	-0.1	3.0	3.6	4.5		
512	-0.1	2.0	2.5	3.2		
1,024	0.0	1.5	1.8	2.3		
2,048	0.0	1.0	1.2	1.7		
4,096	0.0	0.7	0.9	1.2		
8,192	0.0	0.5	0.6	0.8		
16,384	0.0	0.4	0.4	0.5		

Table 6 (World-Bank-definition \$3.20/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	83.4	0.0	11.6	16.6
<=27	10.8	77.6	0.0	11.6	22.4
<=29	14.2	74.2	0.0	11.6	25.8
<=32	19.9	68.5	0.0	11.6	31.5
<=34	24.2	64.2	0.0	11.6	35.7
<=36	28.4	60.0	0.0	11.6	40.0
<=38	32.6	55.8	0.1	11.5	44.1
<=40	37.2	51.2	0.1	11.5	48.7
<=42	41.7	46.7	0.1	11.5	53.2
<=44	46.1	42.3	0.2	11.4	57.6
<=46	50.6	37.8	0.2	11.4	62.0
<=48	54.8	33.6	0.3	11.3	66.1
<=50	58.8	29.6	0.4	11.2	70.1
<=52	63.0	25.4	0.5	11.1	74.1
<=54	67.0	21.4	0.6	11.0	78.0
<=56	70.6	17.8	0.9	10.7	81.3
<=59	75.3	13.1	1.5	10.1	85.4
<=62	79.1	9.3	2.4	9.2	88.3
<=65	82.3	6.1	3.7	7.9	90.2
<=68	84.9	3.5	5.3	6.3	91.2
<=73	87.2	1.2	8.0	3.6	90.8
<=100	88.4	0.0	11.6	0.0	88.4

Table 7 (World-Bank-definition \$3.20/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
$\underline{\hspace{1cm}}$ cut-off	$__$ targeted	poor	$__$ targeted	
<=22	5.0	100.0	5.6	Only poor targeted
<=27	10.8	99.9	12.2	$1,\!425.3:1$
<=29	14.2	99.8	16.1	559.2:1
<=32	19.9	99.9	22.5	783.5:1
<=34	24.2	99.9	27.3	951.8:1
<=36	28.5	99.9	32.1	673.7:1
<=38	32.7	99.8	36.8	410.6:1
<=40	37.3	99.7	42.1	384.3:1
<=42	41.9	99.7	47.2	342.7:1
<=44	46.3	99.7	52.2	285.5:1
<=46	50.8	99.6	57.2	254.6:1
<=48	55.1	99.5	62.0	199.6:1
<=50	59.2	99.4	66.5	166.1:1
<=52	63.5	99.2	71.3	129.5:1
<=54	67.6	99.1	75.8	110.9:1
<=56	71.5	98.7	79.9	77.3:1
<=59	76.8	98.0	85.2	49.4:1
<=62	81.5	97.0	89.4	32.9:1
<=65	86.0	95.7	93.1	22.4:1
<=68	90.3	94.1	96.1	15.9:1
<=73	95.2	91.6	98.6	10.9:1
<=100	100.0	88.4	100.0	7.6:1

Tables for the World-Bank-Definition 5.50/day 2011 PPP Poverty Line

Table 5 (World-Bank-definition \$5.50/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	\pm interval (\pm percent	age points)		
n	Error	90-percent	95-percent	99-percent		
1	+0.1	9.1	50.0	64.5		
4	-0.2	14.7	19.4	29.1		
8	-0.1	10.0	12.8	19.5		
16	+0.1	7.4	9.0	12.3		
32	+0.2	5.2	6.2	8.1		
64	+0.2	3.6	4.4	5.7		
128	+0.2	2.6	3.2	4.5		
256	+0.3	1.8	2.3	3.1		
512	+0.2	1.3	1.6	2.1		
1,024	+0.2	1.0	1.1	1.6		
2,048	+0.3	0.7	0.8	1.1		
4,096	+0.3	0.5	0.6	0.7		
8,192	+0.3	0.3	0.4	0.5		
16,384	+0.2	0.3	0.3	0.4		

Table 6 (World-Bank-definition \$5.50/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	91.4	0.0	3.6	8.6
<=27	10.8	85.6	0.0	3.6	14.4
<=29	14.2	82.2	0.0	3.6	17.8
<=32	19.9	76.5	0.0	3.6	23.5
<=34	24.2	72.2	0.0	3.6	27.8
<=36	28.4	67.9	0.0	3.6	32.0
<=38	32.6	63.7	0.0	3.6	36.2
<=40	37.3	59.1	0.0	3.6	40.9
<=42	41.8	54.6	0.0	3.6	45.4
<=44	46.3	50.1	0.0	3.6	49.8
<=46	50.8	45.6	0.0	3.6	54.3
<=48	55.1	41.3	0.0	3.6	58.6
<=50	59.1	37.2	0.0	3.6	62.7
<=52	63.5	32.9	0.0	3.6	67.0
<=54	67.6	28.8	0.0	3.6	71.2
<=56	71.5	24.9	0.1	3.5	75.0
<=59	76.7	19.7	0.2	3.5	80.1
<=62	81.1	15.3	0.4	3.2	84.3
<=65	85.5	10.9	0.5	3.1	88.5
<=68	89.5	6.9	0.8	2.8	92.2
<=73	93.5	2.9	1.7	1.9	95.4
<=100	96.4	0.0	3.6	0.0	96.4

Table 7 (World-Bank-definition \$5.50/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	who are	HHs who are	who are	non-poor HH targeted
$\underline{ ext{cut-off}}$	$\underline{\hspace{1cm}}$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	
<=22	5.0	100.0	5.2	Only poor targeted
<=27	10.8	99.9	11.2	$1,\!425.3:1$
<=29	14.2	99.9	14.7	1,881.0:1
<=32	19.9	100.0	20.6	2,634.6:1
<=34	24.2	100.0	25.1	3,200.0:1
<=36	28.5	99.9	29.5	1,711.6:1
<=38	32.7	99.9	33.9	1,964.2:1
<=40	37.3	100.0	38.7	$2,\!246.5:1$
<=42	41.9	99.9	43.4	$1,\!288.7:1$
< = 44	46.3	99.9	48.0	$1,\!425.0:1$
<=46	50.8	99.9	52.7	$1,\!165.6:1$
<=48	55.1	99.9	57.1	1,264.2:1
<=50	59.2	99.9	61.4	1,358.1:1
<=52	63.5	99.9	65.9	1,391.8:1
<=54	67.6	99.9	70.1	1,481.9:1
<=56	71.5	99.9	74.1	887.4:1
<=59	76.8	99.8	79.5	506.0:1
<=62	81.5	99.5	84.1	213.9:1
<=65	86.0	99.4	88.7	162.0:1
<=68	90.3	99.1	92.8	107.9:1
<=73	95.2	98.2	97.0	54.4:1
<=100	100.0	96.4	100.0	26.7:1

Tables for the World-Bank-Definition $\$21.70/\mathrm{day}\ 2011\ \mathrm{PPP}\ \mathrm{Poverty}\ \mathrm{Line}$

Table 5 (World-Bank-definition \$21.70/day 2011 PPP line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	-0.1	0.1	0.6	0.6		
4	-0.1	0.2	0.2	0.3		
8	-0.1	0.1	0.2	0.2		
16	-0.1	0.1	0.1	0.2		
32	-0.1	0.1	0.1	0.1		
64	-0.1	0.1	0.1	0.8		
128	0.0	0.0	0.1	0.4		
256	0.0	0.0	0.2	0.2		
512	0.0	0.1	0.1	0.1		
1,024	0.0	0.1	0.1	0.1		
2,048	0.0	0.0	0.1	0.1		
4,096	0.0	0.0	0.0	0.1		
8,192	0.0	0.0	0.0	0.0		
16,384	0.0	0.0	0.0	0.0		

Table 6 (World-Bank-definition \$21.70/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\stackrel{ ext{mistakenly}}{ ext{mistakenly}}$	correctly	+
cut-off	$\operatorname{targeted}$	not targeted	targeted	not targeted	Exclusion
<=22	5.0	95.0	0.0	0.0	5.0
<=27	10.8	89.2	0.0	0.0	10.8
<=29	14.2	85.8	0.0	0.0	14.2
<=32	19.9	80.1	0.0	0.0	19.9
<=34	24.2	75.8	0.0	0.0	24.2
<=36	28.5	71.5	0.0	0.0	28.5
<=38	32.7	67.3	0.0	0.0	32.7
<=40	37.3	62.6	0.0	0.0	37.4
<=42	41.9	58.1	0.0	0.0	41.9
<=44	46.3	53.7	0.0	0.0	46.3
<=46	50.8	49.2	0.0	0.0	50.8
<=48	55.1	44.9	0.0	0.0	55.1
<=50	59.2	40.8	0.0	0.0	59.2
<=52	63.5	36.5	0.0	0.0	63.5
<=54	67.6	32.4	0.0	0.0	67.6
<=56	71.5	28.4	0.0	0.0	71.6
<=59	76.8	23.2	0.0	0.0	76.8
<=62	81.5	18.5	0.0	0.0	81.5
<=65	86.0	14.0	0.0	0.0	86.0
<=68	90.3	9.7	0.0	0.0	90.3
<=73	95.2	4.8	0.0	0.0	95.2
<=100	100.0	0.0	0.0	0.0	100.0

Table 7 (World-Bank-definition \$21.70/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	$\underline{\hspace{1cm}}$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	-
<=22	5.0	100.0	5.0	Only poor targeted
<=27	10.8	100.0	10.8	Only poor targeted
<=29	14.2	100.0	14.2	Only poor targeted
<=32	19.9	100.0	19.9	Only poor targeted
<=34	24.2	100.0	24.2	Only poor targeted
<=36	28.5	100.0	28.5	Only poor targeted
<=38	32.7	100.0	32.7	Only poor targeted
<=40	37.3	100.0	37.4	Only poor targeted
<=42	41.9	100.0	41.9	Only poor targeted
<=44	46.3	100.0	46.3	Only poor targeted
<=46	50.8	100.0	50.8	Only poor targeted
<=48	55.1	100.0	55.1	Only poor targeted
<=50	59.2	100.0	59.2	Only poor targeted
<=52	63.5	100.0	63.5	Only poor targeted
<=54	67.6	100.0	67.6	Only poor targeted
< = 56	71.5	100.0	71.6	Only poor targeted
<=59	76.8	100.0	76.8	Only poor targeted
<=62	81.5	100.0	81.5	Only poor targeted
<=65	86.0	100.0	86.0	Only poor targeted
<=68	90.3	100.0	90.3	Only poor targeted
<=73	95.2	100.0	95.2	4,854.4:1
<=100	100.0	100.0	100.0	5,098.4:1

$Tables\ for \\ the\ World-Bank-Definition \\ First-Decile\ (10^{th}\text{-percentile})\ Poverty\ Line \\$

Table 5 (World-Bank-definition first-decile, 10th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value					
\mathbf{Size}		Confidence interval $(\pm percentage points)$					
n	Error	90-percent	95-percent	99-percent			
1	-0.5	50.0	65.6	68.7			
4	-0.2	20.3	25.4	37.6			
8	0.0	14.3	17.7	26.6			
16	0.0	10.3	13.0	17.1			
32	-0.1	7.7	9.3	13.2			
64	0.0	5.4	6.4	8.7			
128	0.0	3.8	4.6	6.0			
256	0.0	2.7	3.2	4.3			
512	0.0	1.9	2.4	3.2			
1,024	0.0	1.4	1.6	2.1			
2,048	0.0	0.9	1.1	1.4			
4,096	-0.1	0.7	0.8	1.1			
8,192	-0.1	0.5	0.6	0.7			
16,384	0.0	0.3	0.4	0.6			

Table 6 (World-Bank-definition first-decile, 10th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\overline{ ext{mistakenly}}$	correctly	+
cut-off	targeted	not targeted	targeted	not targeted	Exclusion
<=22	1.9	5.3	3.1	89.7	91.7
<=27	3.4	3.8	7.4	85.4	88.8
<=29	4.1	3.1	10.1	82.6	86.7
<=32	5.0	2.3	15.0	77.8	82.8
<=34	5.4	1.9	18.8	74.0	79.3
<=36	5.8	1.4	22.7	70.1	75.9
<=38	6.0	1.2	26.6	66.2	72.2
<=40	6.4	0.9	31.0	61.8	68.2
<=42	6.6	0.7	35.3	57.5	64.0
<=44	6.7	0.5	39.6	53.2	59.9
<=46	6.9	0.4	43.9	48.8	55.7
<=48	6.9	0.3	48.2	44.6	51.5
<=50	7.0	0.2	52.2	40.6	47.6
<=52	7.1	0.2	56.5	36.3	43.4
<=54	7.1	0.1	60.5	32.3	39.4
<=56	7.2	0.1	64.4	28.4	35.5
<=59	7.2	0.0	69.6	23.2	30.4
<=62	7.2	0.0	74.2	18.5	25.8
<=65	7.2	0.0	78.8	14.0	21.2
<=68	7.2	0.0	83.1	9.7	16.9
<=73	7.2	0.0	88.0	4.8	12.0
<=100	7.2	0.0	92.8	0.0	7.2

Table 7 (World-Bank-definition first-decile, 10th-percentile line):
Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	${ m who} { m are}$	HHs who are	who are	non-poor HH targeted
$\underline{ ext{cut-off}}$	$__$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	
<=22	5.0	38.8	26.8	0.6:1
<=27	10.8	31.6	47.1	0.5:1
<=29	14.2	28.8	56.6	0.4:1
<=32	19.9	24.9	68.5	0.3:1
<=34	24.2	22.2	74.4	0.3:1
<=36	28.5	20.4	80.2	0.3:1
<=38	32.7	18.5	83.5	0.2:1
<=40	37.3	17.1	88.2	0.2:1
<=42	41.9	15.7	90.9	0.2:1
<=44	46.3	14.5	92.9	0.2:1
< = 46	50.8	13.5	95.1	0.2:1
<=48	55.1	12.6	96.0	0.1:1
<=50	59.2	11.8	96.9	0.1:1
<=52	63.5	11.1	97.7	0.1:1
<=54	67.6	10.5	98.7	0.1:1
<=56	71.5	10.0	99.1	0.1:1
<=59	76.8	9.4	99.9	0.1:1
<=62	81.5	8.9	100.0	0.1:1
<=65	86.0	8.4	100.0	0.1:1
<=68	90.3	8.0	100.0	0.1:1
<=73	95.2	7.6	100.0	0.1:1
<=100	100.0	7.2	100.0	0.1:1

Table 5 (World-Bank-definition first-quintile, 20th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	-0.5	53.5	67.9	82.0		
4	-0.3	27.1	31.9	44.2		
8	+0.4	18.4	22.7	30.4		
16	+0.1	13.4	15.9	21.8		
32	-0.1	9.7	11.2	14.6		
64	+0.1	6.8	8.0	10.3		
128	0.0	5.0	5.7	7.7		
256	0.0	3.3	4.0	5.1		
512	0.0	2.4	2.9	3.7		
1,024	+0.1	1.6	1.9	2.5		
2,048	0.0	1.2	1.3	1.8		
4,096	0.0	0.9	1.0	1.4		
8,192	0.0	0.6	0.7	1.0		
16,384	0.0	0.4	0.5	0.7		

Table 6 (World-Bank-definition first-quintile, 20th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	mistakenly	$\stackrel{ ext{mistakenly}}{ ext{mistakenly}}$	$\frac{1}{\text{correctly}}$	+
cut-off	$\operatorname{targeted}$	not targeted	$\mathbf{targeted}^{T}$	not targeted	Exclusion
<=22	3.4	11.2	1.6	83.8	87.2
<=27	6.2	8.5	4.6	80.7	86.9
<=29	7.5	7.1	6.7	78.6	86.2
<=32	9.4	5.3	10.5	74.8	84.1
<=34	10.4	4.3	13.8	71.5	81.9
<=36	11.2	3.4	17.2	68.1	79.3
<=38	11.9	2.8	20.8	64.6	76.4
<=40	12.7	2.0	24.7	60.7	73.3
<=42	13.1	1.6	28.8	56.5	69.6
<=44	13.4	1.2	32.9	52.5	65.9
<=46	13.7	0.9	37.1	48.3	62.0
<=48	13.9	0.8	41.2	44.1	58.0
<=50	14.0	0.6	45.1	40.2	54.2
<=52	14.2	0.5	49.3	36.0	50.2
<=54	14.3	0.4	53.3	32.0	46.3
<=56	14.4	0.3	57.1	28.2	42.6
<=59	14.6	0.1	62.2	23.1	37.7
<=62	14.6	0.0	66.8	18.5	33.1
<=65	14.7	0.0	71.3	14.0	28.7
<=68	14.7	0.0	75.6	9.7	24.4
<=73	14.7	0.0	80.6	4.8	19.4
<=100	14.7	0.0	85.3	0.0	14.7

Table 7 (World-Bank-definition first-quintile, 20th-percentile line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	$__$ targeted	poor	$__$ targeted $__$	
<=22	5.0	68.6	23.3	2.2:1
<=27	10.8	57.4	42.2	1.3:1
<=29	14.2	53.0	51.3	1.1:1
<=32	19.9	47.0	63.8	0.9:1
< = 34	24.2	42.9	70.8	0.8:1
<=36	28.5	39.4	76.5	0.7:1
<=38	32.7	36.4	81.0	0.6:1
<=40	37.3	33.9	86.4	0.5:1
< = 42	41.9	31.2	89.1	0.5:1
< = 44	46.3	29.0	91.5	0.4:1
< = 46	50.8	27.0	93.6	0.4:1
<=48	55.1	25.2	94.6	0.3:1
<=50	59.2	23.7	95.7	0.3:1
<=52	63.5	22.3	96.8	0.3:1
< = 54	67.6	21.2	97.6	0.3:1
< = 56	71.5	20.1	98.2	0.3:1
< = 59	76.8	19.0	99.4	0.2:1
<=62	81.5	18.0	99.8	0.2:1
<=65	86.0	17.1	100.0	0.2:1
<=68	90.3	16.2	100.0	0.2:1
< = 73	95.2	15.4	100.0	0.2:1
<=100	100.0	14.7	100.0	0.2:1

$Tables\ for$ the World-Bank-Definition $Second\mbox{-}Quintile\ (40^{\mbox{\tiny th}}\mbox{-}percentile)\ Poverty\ Line$

Table 5 (World-Bank-definition second-quintile, 40thpercentile line): Errors in estimated poverty rates for a
sample of a population of participants' households at a
point in time (average of differences between estimated
and observed values), by sample size and with confidence
intervals

Sample	Sample Difference between estimate and observed value						
\mathbf{Size}	$\underline{\text{Confidence interval } (\pm \text{percentage points})}$						
n	Error	90-percent	95-percent	99-percent			
1	+0.6	63.5	76.7	86.8			
4	-0.4	31.8	37.8	49.9			
8	-0.1	22.9	28.7	36.7			
16	+0.1	16.3	19.7	25.6			
32	-0.3	11.8	14.1	17.4			
64	-0.2	8.3	9.9	12.3			
128	-0.1	5.7	6.9	8.5			
256	-0.1	4.1	5.0	6.8			
512	-0.1	2.8	3.4	4.9			
1,024	-0.1	2.0	2.4	3.0			
2,048	-0.1	1.4	1.7	2.2			
4,096	-0.1	1.0	1.2	1.6			
8,192	-0.2	0.7	0.9	1.2			
16,384	-0.2	0.5	0.6	0.8			

Table 6 (World-Bank-definition second-quintile, 40th-percentile line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
$\operatorname{\mathbf{cut}}$ -off	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	4.5	26.6	0.5	68.4	72.9
<=27	9.1	22.0	1.6	67.2	76.3
<=29	11.6	19.6	2.7	66.2	77.8
<=32	15.3	15.9	4.6	64.2	79.5
<=34	17.8	13.4	6.4	62.5	80.2
<=36	20.0	11.2	8.5	60.4	80.4
<=38	21.7	9.4	10.9	57.9	79.7
<=40	23.6	7.5	13.7	55.2	78.8
<=42	25.3	5.9	16.6	52.3	77.5
<=44	26.3	4.8	19.9	48.9	75.3
<=46	27.5	3.6	23.3	45.6	73.1
<=48	28.3	2.8	26.7	42.1	70.5
<=50	29.0	2.1	30.2	38.7	67.7
<=52	29.6	1.6	34.0	34.9	64.5
<=54	30.1	1.0	37.5	31.3	61.5
<=56	30.5	0.7	41.1	27.8	58.2
<=59	30.9	0.3	45.9	22.9	53.8
<=62	31.0	0.2	50.5	18.4	49.4
<=65	31.1	0.1	54.9	14.0	45.1
<=68	31.1	0.0	59.2	9.7	40.8
<=73	31.1	0.0	64.1	4.8	35.9
<=100	31.1	0.0	68.9	0.0	31.1

Table 7 (World-Bank-definition second-quintile, 40th-percentile line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Door UUs tormated	
Targeting	who are	HHs who are	$\overline{\text{who are}}$	Poor HHs targeted per non-poor HH targeted	
cut-off	$_{ m targeted}$	poor	$_$ targeted		
<=22	5.0	90.7	14.5	9.7:1	
<=27	10.8	84.7	29.3	5.6:1	
<=29	14.2	81.3	37.1	4.3:1	
<=32	19.9	76.8	49.1	3.3:1	
<=34	24.2	73.5	57.0	2.8:1	
<=36	28.4	70.2	64.1	2.4:1	
<=38	32.6	66.6	69.8	2.0:1	
< = 40	37.3	63.3	75.9	1.7:1	
< = 42	41.9	60.4	81.1	1.5:1	
<=44	46.3	56.9	84.6	1.3:1	
< =46	50.8	54.2	88.4	1.2:1	
<=48	55.1	51.5	91.0	1.1:1	
<=50	59.2	49.0	93.1	1.0:1	
<=52	63.5	46.5	94.9	0.9:1	
<=54	67.6	44.5	96.7	0.8:1	
<=56	71.5	42.6	97.8	0.7:1	
<=59	76.8	40.2	99.1	0.7:1	
<=62	81.5	38.0	99.5	0.6:1	
<=65	86.0	36.2	99.8	0.6:1	
<=68	90.3	34.5	99.9	0.5:1	
<=73	95.2	32.7	100.0	0.5:1	
<=100	100.0	31.1	100.0	0.5:1	

Tables for the World-Bank-Definition Median ($50^{ ext{th}}$ -percentile) Poverty Line

Table 5 (World-Bank-definition median, 50th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	e interval (\pm percent	age points)		
<i>n</i>	Error	90-percent	$95 ext{-percent}$	99-percent		
1	-1.0	70.6	79.2	91.1		
4	-0.6	32.5	38.0	48.4		
8	-0.4	24.1	28.6	39.6		
16	-0.6	16.5	20.0	26.6		
32	-0.7	12.3	14.8	20.0		
64	-0.5	8.5	10.3	13.6		
128	-0.6	6.0	7.3	9.2		
256	-0.6	4.3	5.2	6.9		
512	-0.6	3.1	3.6	4.7		
1,024	-0.5	2.2	2.6	3.4		
2,048	-0.6	1.5	1.8	2.4		
4,096	-0.6	1.0	1.2	1.7		
8,192	-0.6	0.8	0.9	1.2		
16,384	-0.6	0.5	0.6	0.8		

Table 6 (World-Bank-definition median, 50th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\stackrel{ ext{mistakenly}}{ ext{mistakenly}}$	correctly	+
cut-off	$\operatorname{targeted}$	not targeted	targeted	not targeted	Exclusion
<=22	4.8	35.8	0.2	59.2	64.0
<=27	9.9	30.6	0.9	58.6	68.5
<=29	12.8	27.8	1.5	58.0	70.7
<=32	17.1	23.4	2.8	56.6	73.8
<=34	20.3	20.3	3.9	55.5	75.8
<=36	23.4	17.2	5.1	54.4	77.8
<=38	25.8	14.8	6.9	52.6	78.4
<=40	28.6	12.0	8.8	50.7	79.3
<=42	30.8	9.7	11.0	48.4	79.2
<=44	32.6	8.0	13.7	45.7	78.3
<=46	34.3	6.2	16.5	43.0	77.3
<=48	35.6	5.0	19.5	39.9	75.5
<=50	36.8	3.8	22.4	37.0	73.8
<=52	37.7	2.8	25.8	33.6	71.4
<=54	38.5	2.1	29.2	30.3	68.8
<=56	39.2	1.4	32.4	27.1	66.2
<=59	39.8	0.7	37.0	22.5	62.3
<=62	40.1	0.5	41.4	18.1	58.2
<=65	40.3	0.2	45.7	13.8	54.1
<=68	40.4	0.1	49.9	9.6	50.0
<=73	40.5	0.0	54.7	4.8	45.3
<=100	40.6	0.0	59.4	0.0	40.6

Table 7 (World-Bank-definition median, 50th-percentile line):
Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	who are	HHs who are	who are	non-poor HH targeted
cut-off	$__$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	
<=22	5.0	95.5	11.8	21.4:1
<=27	10.8	92.0	24.4	11.5:1
<=29	14.2	89.7	31.5	8.7:1
<=32	19.9	85.9	42.2	6.1:1
<=34	24.2	83.8	50.0	5.2:1
<=36	28.5	82.2	57.7	4.6:1
<=38	32.7	79.0	63.6	3.8:1
<=40	37.3	76.5	70.5	3.3:1
<=42	41.9	73.6	76.0	2.8:1
<=44	46.3	70.4	80.4	2.4:1
<=46	50.8	67.5	84.6	2.1:1
<=48	55.1	64.6	87.7	1.8:1
<=50	59.2	62.1	90.6	1.6:1
< = 52	63.5	59.4	93.0	1.5:1
< = 54	67.6	56.9	94.9	1.3:1
<=56	71.5	54.7	96.6	1.2:1
< = 59	76.8	51.9	98.2	1.1:1
<=62	81.5	49.2	98.9	1.0:1
<=65	86.0	46.9	99.4	0.9:1
<=68	90.3	44.8	99.7	0.8:1
<=73	95.2	42.6	99.9	0.7:1
<=100	100.0	40.6	100.0	0.7:1

Table 5 (World-Bank-definition third-quintile, 60th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	e interval (\pm percent	<u>age points)</u>		
n	Error	90-percent	95-percent	99-percent		
1	-1.2	66.6	79.7	91.4		
4	-1.9	32.9	39.0	50.8		
8	-1.6	24.2	28.6	38.9		
16	-1.3	17.4	20.6	25.9		
32	-1.5	11.9	14.4	18.7		
64	-1.3	8.4	9.8	13.5		
128	-1.4	5.8	7.0	9.5		
256	-1.4	4.4	5.3	6.7		
512	-1.5	3.0	3.5	4.6		
1,024	-1.4	2.1	2.5	3.4		
2,048	-1.4	1.5	1.8	2.2		
4,096	-1.5	1.0	1.2	1.5		
8,192	-1.5	0.7	0.9	1.1		
16,384	-1.5	0.5	0.6	0.8		

Table 6 (World-Bank-definition third-quintile, 60th-percentile line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	<u>Inclusion:</u>	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	45.9	0.1	49.1	54.0
<=27	10.5	40.3	0.2	48.9	59.5
<=29	13.7	37.1	0.5	48.7	62.4
<=32	18.6	32.2	1.3	47.9	66.5
<=34	22.2	28.6	2.0	47.2	69.4
<=36	25.8	25.0	2.6	46.5	72.4
<=38	29.0	21.9	3.7	45.5	74.4
<=40	32.5	18.3	4.8	44.4	76.9
<=42	35.5	15.3	6.3	42.8	78.4
<=44	38.2	12.6	8.1	41.1	79.2
<=46	40.9	9.9	9.9	39.3	80.2
<=48	42.7	8.2	12.4	36.7	79.4
<=50	44.5	6.4	14.7	34.5	78.9
<=52	46.2	4.6	17.3	31.8	78.0
<=54	47.4	3.4	20.2	28.9	76.3
<=56	48.4	2.4	23.1	26.1	74.5
<=59	49.4	1.4	27.4	21.8	71.2
<=62	49.8	1.0	31.6	17.5	67.4
<=65	50.3	0.6	35.7	13.4	63.7
<=68	50.5	0.4	39.8	9.3	59.8
< = 73	50.7	0.1	44.5	4.7	55.4
<=100	50.8	0.0	49.2	0.0	50.8

Table 7 (World-Bank-definition third-quintile, 60th-percentile line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	De an IIIIn de made d'arres
Targeting	$\mathbf{who} \ \mathbf{are}$	HHs who are	who are	Poor HHs targeted per
cut-off	$__$ targeted	poor	$_$ targeted	non-poor HH targeted
<=22	5.0	98.4	9.7	61.2:1
<=27	10.8	97.8	20.7	45.4:1
<=29	14.2	96.4	27.0	26.5:1
<=32	19.9	93.5	36.6	14.3:1
<=34	24.2	91.8	43.7	11.2:1
<=36	28.5	90.8	50.8	9.9:1
<=38	32.7	88.7	57.0	7.8:1
<=40	37.3	87.2	64.0	6.8:1
<=42	41.9	84.9	69.9	5.6:1
<=44	46.3	82.5	75.1	4.7:1
<=46	50.8	80.6	80.5	4.1:1
<=48	55.1	77.5	84.0	3.4:1
<=50	59.2	75.2	87.5	3.0:1
<=52	63.5	72.7	90.9	2.7:1
<=54	67.6	70.1	93.2	2.3:1
<=56	71.5	67.7	95.3	2.1:1
<=59	76.8	64.4	97.2	1.8:1
<=62	81.5	61.2	98.0	1.6:1
<=65	86.0	58.4	98.9	1.4:1
<=68	90.3	55.9	99.3	1.3:1
<=73	95.2	53.3	99.8	1.1:1
<=100	100.0	50.8	100.0	1.0:1

$Tables\ for$ the World-Bank-Definition $Fourth\mbox{-}Quintile\ (80^{\mbox{\tiny th}}\mbox{-}percentile)\ Poverty\ Line$

Table 5 (World-Bank-definition fourth-quintile, 80th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample	Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	\pm interval (\pm percent	age points)	
n	Error	90-percent	95-percent	99-percent	
1	+0.9	61.3	76.0	89.2	
4	0.0	29.1	34.8	48.8	
8	-0.2	20.8	26.1	34.2	
16	+0.1	15.9	18.7	25.6	
32	-0.3	10.6	12.8	16.2	
64	-0.1	7.5	8.8	11.3	
128	0.0	5.3	6.3	8.1	
256	-0.2	3.8	4.6	6.0	
512	-0.2	2.6	3.1	3.9	
1,024	-0.2	1.9	2.2	2.9	
2,048	-0.2	1.3	1.5	2.1	
4,096	-0.2	0.9	1.1	1.5	
8,192	-0.2	0.7	0.8	1.1	
16,384	-0.2	0.5	0.6	0.7	

Table 6 (World-Bank-definition fourth-quintile, 80th-percentile line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	5.0	67.9	0.0	27.2	32.1
<=27	10.7	62.1	0.0	27.1	37.9
<=29	14.1	58.7	0.1	27.1	41.2
<=32	19.8	53.0	0.1	27.0	46.8
<=34	23.9	48.9	0.3	26.9	50.8
<=36	28.1	44.7	0.4	26.8	54.9
<=38	32.1	40.7	0.6	26.6	58.7
<=40	36.6	36.2	0.7	26.4	63.0
<=42	40.7	32.1	1.1	26.0	66.8
<=44	44.8	28.0	1.5	25.7	70.5
<=46	48.9	23.9	1.9	25.3	74.2
<=48	52.5	20.3	2.5	24.6	77.2
<=50	55.8	17.0	3.4	23.8	79.6
<=52	59.3	13.5	4.2	23.0	82.3
< = 54	62.1	10.7	5.5	21.6	83.7
< = 56	64.8	8.1	6.8	20.4	85.2
<=59	67.5	5.4	9.4	17.8	85.3
<=62	69.2	3.6	12.2	15.0	84.2
<=65	70.6	2.2	15.4	11.8	82.4
<=68	71.5	1.3	18.8	8.4	79.9
< = 73	72.4	0.4	22.8	4.4	76.8
<=100	72.8	0.0	27.2	0.0	72.8

Table 7 (World-Bank-definition fourth-quintile, 80th-percentile line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	\mathbf{w} ho are	HHs who are	who are	
cut-off	$_{ m targeted}$	poor	$_$ targeted	non-poor HH targeted
<=22	5.0	99.5	6.8	207.3:1
<=27	10.8	99.7	14.8	340.9:1
<=29	14.2	99.3	19.4	134.5:1
<=32	19.9	99.3	27.2	146.3:1
<=34	24.2	98.8	32.8	85.1:1
<=36	28.5	98.7	38.6	76.4:1
<=38	32.7	98.3	44.1	58.2:1
<=40	37.3	98.0	50.3	48.8:1
<=42	41.9	97.3	55.9	35.8:1
<=44	46.3	96.8	61.5	30.3:1
<=46	50.8	96.3	67.2	26.2:1
<=48	55.1	95.4	72.2	20.6:1
<=50	59.2	94.3	76.6	16.6:1
< = 52	63.5	93.4	81.4	14.1:1
<=54	67.6	91.8	85.3	11.2:1
< = 56	71.5	90.5	88.9	9.6:1
< = 59	76.8	87.8	92.6	7.2:1
<=62	81.5	85.0	95.1	5.7:1
< = 65	86.0	82.1	97.0	4.6:1
<=68	90.3	79.2	98.2	3.8:1
< = 73	95.2	76.1	99.4	3.2:1
<=100	100.0	72.8	100.0	2.7:1

${\bf Tables~for} \\ {\bf 100\%~of~the~INSTAT-Definition~National~Poverty~Line}$

Table 5 (100% of the INSTAT-definition national line):

Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	e interval (±percent	age points)		
n	Error	90-percent	95-percent	99-percent		
1	+1.9	64.3	78.0	92.2		
4	-1.0	33.7	42.1	56.1		
8	-1.0	23.5	29.1	38.0		
16	-0.9	18.3	21.4	27.6		
32	-1.0	12.2	14.5	18.7		
64	-0.9	8.3	10.5	13.7		
128	-0.7	6.1	7.1	9.1		
256	-0.8	4.2	5.2	6.6		
512	-0.8	2.9	3.4	4.5		
1,024	-0.8	2.0	2.3	3.3		
2,048	-0.8	1.5	1.9	2.3		
4,096	-0.8	1.1	1.3	1.6		
8,192	-0.8	0.7	0.9	1.1		
16,384	-0.8	0.5	0.6	0.8		

Table 6 (100% of the INSTAT-definition national line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

-	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	56.9	0.0	38.2	43.1
<=27	10.6	51.1	0.1	38.1	48.7
<=29	14.0	47.7	0.3	37.9	51.9
<=32	19.6	42.1	0.6	37.7	57.3
<=34	23.6	38.1	0.9	37.4	61.0
<=36	27.6	34.2	1.3	36.9	64.5
<=38	31.5	30.3	1.8	36.5	68.0
<=40	35.9	25.9	2.2	36.0	71.9
<=42	39.7	22.0	3.2	35.0	74.8
<=44	43.3	18.5	4.1	34.2	77.5
<=46	46.7	15.1	5.2	33.1	79.7
<=48	49.7	12.0	6.8	31.5	81.2
<=50	52.2	9.6	8.6	29.7	81.9
<=52	54.6	7.2	10.5	27.8	82.4
<=54	56.5	5.3	12.6	25.6	82.1
<=56	58.0	3.7	14.9	23.3	81.3
<=59	59.4	2.3	18.7	19.5	79.0
<=62	60.2	1.6	22.3	15.9	76.1
<=65	60.9	0.8	26.0	12.3	73.2
<=68	61.3	0.4	29.6	8.6	70.0
<=73	61.6	0.1	34.0	4.2	65.9
<=100	61.7	0.0	38.3	0.0	61.7

Table 7 (100% of the INSTAT-definition national line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	targeted	poor	$__$ targeted	
<=22	4.9	99.4	7.9	157.0:1
<=27	10.7	98.7	17.2	79.0:1
<=29	14.3	97.9	22.7	45.5:1
<=32	20.2	97.1	31.8	33.0:1
<=34	24.5	96.3	38.2	26.3:1
<=36	28.9	95.5	44.7	21.2:1
<=38	33.3	94.7	51.0	17.7:1
<=40	38.1	94.1	58.1	16.0:1
<=42	42.9	92.5	64.3	12.4:1
<=44	47.4	91.4	70.1	10.6:1
<=46	51.9	90.0	75.6	9.0:1
<=48	56.5	88.0	80.5	7.4:1
<=50	60.7	85.9	84.5	6.1:1
<=52	65.0	83.9	88.4	5.2:1
<=54	69.1	81.7	91.5	4.5:1
<=56	73.0	79.5	94.0	3.9:1
<=59	78.2	76.0	96.3	3.2:1
<=62	82.5	72.9	97.5	2.7:1
<=65	86.9	70.1	98.7	2.3:1
<=68	90.9	67.4	99.3	2.1:1
<=73	95.7	64.4	99.8	1.8:1
<=100	100.0	61.7	100.0	1.6:1

${\bf Tables~for} \\ {\bf the~INSTAT-Definition~Food~Poverty~Line}$

Table 5 (INSTAT-definition food line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

$\overline{ ext{Sample}}$	Difference between estimate and observed value					
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	+1.9	69.5	78.5	87.7		
4	-0.4	35.5	42.6	59.1		
8	-0.4	24.2	29.4	38.2		
16	-0.3	17.7	20.6	29.9		
32	-0.2	12.2	14.8	18.8		
64	-0.3	8.7	10.5	14.5		
128	-0.2	6.2	7.6	9.9		
256	-0.3	4.6	5.3	6.8		
512	-0.3	3.2	3.7	5.0		
1,024	-0.2	2.3	2.8	3.7		
2,048	-0.2	1.6	1.9	2.4		
4,096	-0.2	1.1	1.3	1.6		
8,192	-0.2	0.8	0.9	1.2		
16,384	-0.2	0.6	0.7	0.9		

Table 6 (INSTAT-definition food line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	4.8	42.0	0.1	53.1	57.9
<=27	10.4	36.5	0.4	52.8	63.2
<=29	13.6	33.2	0.7	52.5	66.1
<=32	18.5	28.4	1.7	51.4	69.9
<=34	22.0	24.9	2.5	50.6	72.6
<=36	25.4	21.5	3.5	49.6	75.0
<=38	28.4	18.4	4.8	48.3	76.7
<=40	31.7	15.2	6.4	46.7	78.4
<=42	34.5	12.4	8.4	44.7	79.2
<=44	36.8	10.1	10.6	42.6	79.4
<=46	38.9	7.9	12.9	40.2	79.1
<=48	40.7	6.2	15.8	37.4	78.1
<=50	42.3	4.6	18.5	34.7	77.0
<=52	43.6	3.3	21.5	31.7	75.2
<=54	44.5	2.4	24.6	28.5	73.0
<=56	45.4	1.4	27.5	25.6	71.0
< = 59	46.1	0.8	32.1	21.0	67.1
<=62	46.4	0.4	36.1	17.1	63.5
<=65	46.7	0.2	40.2	12.9	59.6
<=68	46.8	0.1	44.2	9.0	55.8
<=73	46.9	0.0	48.8	4.3	51.2
<=100	46.9	0.0	53.1	0.0	46.9

Table 7 (INSTAT-definition food line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	$\mathbf{w}\mathbf{ho}\ \mathbf{are}$	HHs who are	who are	non-poor HH targeted
cut-off	$_$ targeted	poor	$_$ targeted	
<=22	4.9	98.6	10.3	70.7:1
<=27	10.7	96.6	22.2	28.7:1
<=29	14.3	95.2	29.1	19.9:1
<=32	20.2	91.4	39.5	10.6:1
<=34	24.5	89.7	46.9	8.7:1
<=36	28.9	87.8	54.1	7.2:1
<=38	33.3	85.5	60.7	5.9:1
<=40	38.1	83.1	67.6	4.9:1
< = 42	42.9	80.3	73.6	4.1:1
<=44	47.4	77.7	78.5	3.5:1
<=46	51.9	75.1	83.1	3.0:1
<=48	56.5	72.1	86.9	2.6:1
<=50	60.7	69.6	90.2	2.3:1
< = 52	65.0	67.0	92.9	2.0:1
<=54	69.1	64.4	95.0	1.8:1
< = 56	73.0	62.2	96.9	1.6:1
< = 59	78.2	58.9	98.3	1.4:1
<=62	82.5	56.3	99.1	1.3:1
< = 65	86.9	53.7	99.6	1.2:1
<=68	90.9	51.4	99.8	1.1:1
<=73	95.7	49.0	100.0	1.0:1
<=100	100.0	46.9	100.0	0.9:1

${\bf Tables~for} \\ {\bf 150\%~of~the~INSTAT-Definition~National~Poverty~Line}$

Table 5 (150% of the INSTAT-definition national line):

Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}	-	$\underline{\text{Confidence}}$	\pm interval (\pm percent	age points)		
n	Error	90-percent	95-percent	99-percent		
1	+0.2	58.6	74.0	86.3		
4	0.0	28.3	35.3	47.5		
8	-0.6	20.5	26.0	34.8		
16	-0.1	15.0	17.7	23.1		
32	0.0	10.6	12.6	16.4		
64	+0.2	7.3	9.3	12.6		
128	+0.3	5.2	6.4	8.6		
256	+0.2	3.7	4.4	6.2		
512	+0.2	2.7	3.1	4.5		
1,024	+0.1	1.9	2.3	3.1		
2,048	+0.1	1.3	1.6	2.2		
4,096	+0.1	0.9	1.1	1.5		
8,192	+0.1	0.7	0.8	1.1		
16,384	+0.1	0.5	0.5	0.7		

Table 6 (150% of the INSTAT-definition national line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	Leakage:	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	74.6	0.0	20.5	25.4
<=27	10.7	68.8	0.0	20.5	31.2
<=29	14.2	65.3	0.1	20.4	34.7
<=32	20.1	59.4	0.1	20.4	40.5
<=34	24.4	55.1	0.1	20.4	44.7
<=36	28.6	50.9	0.3	20.2	48.8
<=38	32.9	46.6	0.4	20.1	53.0
<=40	37.7	41.8	0.5	20.0	57.7
<=42	42.2	37.3	0.7	19.8	62.0
<=44	46.5	33.0	0.9	19.6	66.1
<=46	50.8	28.7	1.1	19.4	70.2
<=48	55.0	24.5	1.5	19.0	74.0
<=50	58.6	20.9	2.1	18.4	77.0
<=52	62.3	17.2	2.7	17.8	80.1
<=54	65.5	14.0	3.7	16.9	82.3
<=56	68.5	11.0	4.5	16.0	84.5
<=59	72.1	7.4	6.1	14.4	86.4
<=62	74.3	5.2	8.3	12.2	86.5
<=65	76.4	3.1	10.5	10.0	86.5
<=68	77.9	1.6	13.1	7.4	85.3
<=73	79.0	0.4	16.6	3.9	82.9
<=100	79.5	0.0	20.5	0.0	79.5

Table 7 (150% of the INSTAT-definition national line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Targeting	% all HHs who are	% targeted HHs who are	% poor HHs who are	Poor HHs targeted per
cut-off	targeted	poor	targeted	non-poor HH targeted
<=22	4.9	100.0	6.2	Only poor targeted
<=27	10.7	99.8	13.5	646.1:1
<=29	14.3	99.5	17.9	196.7:1
<=32	20.2	99.4	25.3	172.2:1
<=34	24.5	99.4	30.7	173.4:1
<=36	28.9	99.1	36.0	104.6:1
<=38	33.3	98.9	41.4	89.3:1
<=40	38.1	98.8	47.4	81.1:1
<=42	42.9	98.3	53.1	58.3:1
<=44	47.4	98.1	58.4	50.8:1
<=46	51.9	97.9	63.8	45.8:1
<=48	56.5	97.3	69.2	36.1:1
<=50	60.7	96.5	73.7	27.5:1
<=52	65.0	95.8	78.4	22.9:1
<=54	69.1	94.7	82.3	17.9:1
<=56	73.0	93.8	86.1	15.2:1
<=59	78.2	92.2	90.6	11.8:1
<=62	82.5	90.0	93.4	9.0:1
<=65	86.9	88.0	96.2	7.3:1
<=68	90.9	85.6	98.0	6.0:1
<=73	95.7	82.6	99.4	4.8:1
<=100	100.0	79.5	100.0	3.9:1

${\bf Tables~for} \\ {\bf 200\%~of~the~INSTAT-Definition~National~Poverty~Line}$

Table 5 (200% of the INSTAT-definition national line):

Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	e interval (±percent	age points)		
n	Error	90-percent	95-percent	99-percent		
1	-1.0	43.9	63.0	80.7		
4	-0.3	23.3	30.4	42.9		
8	-0.6	17.2	21.9	30.2		
16	-0.4	12.4	14.8	20.1		
32	-0.2	8.7	10.5	15.5		
64	-0.1	6.5	7.7	10.2		
128	0.0	4.3	5.3	7.2		
256	-0.1	3.2	3.7	5.3		
512	-0.1	2.3	2.7	3.7		
1,024	-0.1	1.7	1.9	2.5		
2,048	-0.1	1.1	1.3	1.7		
4,096	-0.1	0.8	0.9	1.2		
8,192	-0.2	0.6	0.6	0.9		
16,384	-0.2	0.4	0.5	0.6		

Table 6 (200% of the INSTAT-definition national line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	83.3	0.0	11.8	16.7
<=27	10.7	77.5	0.0	11.7	22.5
<=29	14.3	74.0	0.0	11.7	26.0
<=32	20.2	68.0	0.0	11.7	31.9
<=34	24.5	63.8	0.1	11.7	36.2
<=36	28.8	59.5	0.1	11.7	40.4
<=38	33.1	55.1	0.1	11.6	44.7
<=40	38.0	50.3	0.2	11.6	49.6
<=42	42.7	45.5	0.2	11.6	54.3
<=44	47.1	41.1	0.2	11.5	58.6
<=46	51.6	36.7	0.3	11.4	63.0
<=48	56.0	32.2	0.5	11.3	67.3
<=50	60.1	28.2	0.7	11.1	71.2
<=52	64.1	24.1	0.9	10.8	75.0
<=54	67.9	20.4	1.2	10.5	78.4
<=56	71.3	17.0	1.7	10.1	81.4
< = 59	75.9	12.4	2.3	9.5	85.4
<=62	79.4	8.9	3.2	8.6	88.0
<=65	82.6	5.6	4.3	7.5	90.1
<=68	85.2	3.0	5.7	6.0	91.3
<=73	87.3	0.9	8.3	3.4	90.8
<=100	88.2	0.0	11.8	0.0	88.2

Table 7 (200% of the INSTAT-definition national line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Townsting	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	$egin{array}{c} ext{who are} \ ext{targeted} \end{array}$	HHs who are poor	$egin{array}{c} \mathbf{who} \ \mathbf{are} \ \mathbf{targeted} \end{array}$	non-poor HH targeted
<=22	4.9	100.0	5.6	Only poor targeted
<=27	10.7	99.9	12.2	1,473.8:1
<=29	14.3	99.9	16.2	914.5:1
<=32	20.2	99.9	22.9	764.2:1
<=34	24.5	99.8	27.7	487.6:1
<=36	28.9	99.7	32.6	294.8:1
<=38	33.3	99.6	37.5	250.2:1
<=40	38.1	99.6	43.0	249.9:1
<=42	42.9	99.5	48.4	217.4:1
<=44	47.4	99.5	53.4	197.7:1
<=46	51.9	99.4	58.4	168.6:1
<=48	56.5	99.2	63.5	120.3:1
<=50	60.7	98.9	68.1	91.5:1
<=52	65.0	98.6	72.7	71.1:1
<=54	69.1	98.2	76.9	55.5:1
<=56	73.0	97.7	80.8	42.5:1
<=59	78.2	97.1	86.0	33.2:1
<=62	82.5	96.2	89.9	25.1:1
<=65	86.9	95.1	93.6	19.3:1
<=68	90.9	93.7	96.6	14.9:1
<=73	95.7	91.3	99.0	10.5:1
<=100	100.0	88.2	100.0	7.5:1

Tables for the INSTAT-Definition $1.25/day\ 2005$ PPP Poverty Line

Table 5 (INSTAT-definition \$1.25/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (±percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	+0.9	63.5	75.4	87.7		
4	0.0	29.2	36.3	46.4		
8	-0.6	21.0	25.4	35.1		
16	-0.1	15.1	18.2	22.3		
32	+0.1	11.1	13.0	16.8		
64	+0.3	7.7	9.1	13.3		
128	+0.3	5.4	6.3	8.9		
256	+0.2	3.7	4.4	6.3		
512	+0.2	2.6	3.1	4.2		
1,024	+0.2	1.9	2.3	3.0		
2,048	+0.2	1.3	1.6	2.2		
4,096	+0.2	0.9	1.2	1.5		
8,192	+0.2	0.7	0.8	1.1		
16,384	+0.2	0.5	0.6	0.7		

Table 6 (INSTAT-definition \$1.25/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	Leakage:	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	72.1	0.0	23.0	27.9
<=27	10.7	66.3	0.0	22.9	33.7
<=29	14.2	62.8	0.1	22.9	37.1
<=32	20.1	56.9	0.1	22.8	42.9
<=34	24.4	52.7	0.1	22.8	47.2
<=36	28.6	48.4	0.3	22.7	51.3
<=38	32.9	44.2	0.4	22.6	55.4
<=40	37.6	39.4	0.5	22.4	60.0
<=42	42.1	35.0	0.9	22.1	64.2
<=44	46.3	30.8	1.1	21.9	68.1
<=46	50.4	26.6	1.4	21.5	72.0
<=48	54.5	22.5	2.0	21.0	75.5
<=50	58.0	19.0	2.7	20.2	78.2
<=52	61.5	15.5	3.5	19.4	81.0
<=54	64.5	12.6	4.6	18.3	82.8
<=56	67.3	9.7	5.6	17.3	84.6
< = 59	70.7	6.3	7.5	15.5	86.2
<=62	72.7	4.4	9.9	13.1	85.7
<=65	74.6	2.4	12.3	10.7	85.3
<=68	75.8	1.3	15.2	7.8	83.5
< = 73	76.8	0.2	18.9	4.1	80.9
<=100	77.0	0.0	23.0	0.0	77.0

Table 7 (INSTAT-definition \$1.25/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Townsting	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	$\begin{array}{c} \text{who are} \\ \text{targeted} \end{array}$	HHs who are poor	$egin{array}{c} \mathbf{who} \ \mathbf{are} \ \mathbf{targeted} \end{array}$	non-poor HH targeted
<=22	4.9	100.0	6.4	Only poor targeted
<=27	10.7	99.8	13.9	646.1:1
<=29	14.3	99.5	18.5	196.7:1
<=32	20.2	99.4	26.1	172.2:1
<=34	24.5	99.4	31.6	173.4:1
<=36	28.9	99.0	37.1	102.3:1
<=38	33.3	98.9	42.7	86.1:1
<=40	38.1	98.6	48.8	72.5:1
< = 42	42.9	98.0	54.6	49.0:1
<=44	47.4	97.7	60.1	42.3:1
<=46	51.9	97.3	65.5	35.6:1
<=48	56.5	96.5	70.8	27.8:1
<=50	60.7	95.5	75.3	21.3:1
<=52	65.0	94.6	79.9	17.6:1
<=54	69.1	93.3	83.7	14.0:1
<=56	73.0	92.3	87.4	11.9:1
< = 59	78.2	90.4	91.8	9.5:1
<=62	82.5	88.0	94.3	7.4:1
<=65	86.9	85.9	96.9	6.1:1
<=68	90.9	83.3	98.3	5.0:1
<=73	95.7	80.3	99.7	4.1:1
<=100	100.0	77.0	100.0	3.4:1

Tables for the INSTAT-Definition 2.00/day 2005 PPP Poverty Line

Table 5 (INSTAT-definition \$2.00/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample	Difference between estimate and observed value					
\mathbf{Size}		Confidence interval (\pm percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	-0.4	45.1	54.9	83.8		
4	-0.3	21.2	27.4	43.8		
8	-0.6	14.8	18.9	28.9		
16	-0.4	11.5	13.5	19.0		
32	-0.1	8.2	9.9	12.8		
64	0.0	5.7	6.8	9.3		
128	+0.2	4.1	5.0	6.8		
256	+0.1	2.9	3.4	4.8		
512	+0.1	2.0	2.5	3.2		
1,024	0.0	1.5	1.8	2.3		
2,048	0.0	1.0	1.2	1.5		
4,096	0.0	0.7	0.8	1.1		
8,192	0.0	0.5	0.6	0.8		
16,384	0.0	0.4	0.4	0.6		

Table 6 (INSTAT-definition \$2.00/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	85.7	0.0	9.4	14.3
<=27	10.7	79.9	0.0	9.4	20.1
<=29	14.3	76.3	0.0	9.4	23.7
<=32	20.2	70.4	0.0	9.3	29.6
<=34	24.5	66.2	0.0	9.3	33.8
<=36	28.8	61.8	0.1	9.3	38.1
<=38	33.1	57.5	0.1	9.3	42.4
<=40	38.0	52.6	0.1	9.2	47.2
<=42	42.8	47.9	0.2	9.2	52.0
<=44	47.2	43.5	0.2	9.1	56.3
<=46	51.6	39.0	0.3	9.1	60.7
<=48	56.2	34.5	0.3	9.0	65.2
<=50	60.2	30.4	0.5	8.9	69.1
<=52	64.4	26.3	0.7	8.7	73.1
<=54	68.3	22.4	0.8	8.5	76.8
<=56	71.8	18.8	1.1	8.2	80.0
<=59	76.7	14.0	1.5	7.8	84.5
<=62	80.4	10.2	2.1	7.3	87.7
<=65	84.0	6.6	2.9	6.5	90.5
<=68	87.0	3.7	4.0	5.4	92.4
<=73	89.5	1.2	6.2	3.2	92.6
<=100	90.6	0.0	9.4	0.0	90.6

Table 7 (INSTAT-definition \$2.00/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Targeting	% all HHs who are	% targeted HHs who are	% poor HHs who are	Poor HHs targeted per	
cut-off	targeted	poor	targeted	non-poor HH targeted	
<=22	4.9	100.0	5.4	Only poor targeted	
<=27	10.7	99.9	11.8	1,473.8:1	
<=29	14.3	99.9	15.8	1,963.9:1	
<=32	20.2	99.9	22.3	$1,\!117.4:1$	
<=34	24.5	99.9	27.0	801.1:1	
<=36	28.9	99.8	31.8	399.4:1	
<=38	33.3	99.7	36.6	310.1:1	
<=40	38.1	99.7	41.9	300.6:1	
<=42	42.9	99.6	47.2	250.0:1	
<=44	47.4	99.6	52.0	221.5:1	
<=46	51.9	99.5	56.9	198.7:1	
<=48	56.5	99.4	62.0	165.9:1	
<=50	60.7	99.2	66.4	121.3:1	
<=52	65.0	99.0	71.0	97.6:1	
<=54	69.1	98.8	75.3	82.4:1	
< = 56	73.0	98.4	79.2	62.9:1	
< = 59	78.2	98.1	84.6	50.5:1	
<=62	82.5	97.5	88.7	38.4:1	
<=65	86.9	96.7	92.7	29.4:1	
<=68	90.9	95.6	96.0	21.9:1	
<=73	95.7	93.5	98.7	14.4:1	
<=100	100.0	90.6	100.0	9.7:1	

Tables for the INSTAT-Definition $2.50/day\ 2005$ PPP Poverty Line

Table 5 (INSTAT-definition \$2.50/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value					
\mathbf{Size}		$\underline{\text{Confidence}}$	\pm interval (\pm percent	age points)			
n	Error	90-percent	95-percent	99-percent			
1	-0.6	24.8	50.0	75.1			
4	-0.1	16.5	22.6	38.0			
8	-0.5	11.9	15.2	22.0			
16	-0.6	9.1	11.0	15.6			
32	-0.3	6.8	8.1	10.6			
64	-0.3	4.8	5.6	7.2			
128	-0.2	3.5	4.2	5.4			
256	-0.2	2.3	2.8	3.8			
512	-0.2	1.6	2.0	2.7			
1,024	-0.2	1.2	1.4	1.8			
2,048	-0.2	0.8	1.0	1.3			
4,096	-0.2	0.6	0.7	0.9			
8,192	-0.3	0.4	0.5	0.7			
16,384	-0.3	0.3	0.3	0.5			

Table 6 (INSTAT-definition \$2.50/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	<u>Inclusion:</u>	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	${f Non-poor}$	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	89.7	0.0	5.4	10.3
<=27	10.7	83.9	0.0	5.4	16.1
<=29	14.3	80.3	0.0	5.4	19.7
<=32	20.2	74.4	0.0	5.3	25.6
<=34	24.5	70.2	0.0	5.3	29.8
<=36	28.8	65.8	0.0	5.3	34.2
<=38	33.2	61.4	0.1	5.3	38.5
<=40	38.0	56.6	0.1	5.3	43.3
<=42	42.8	51.8	0.1	5.2	48.0
<=44	47.2	47.4	0.2	5.2	52.4
<=46	51.7	43.0	0.2	5.2	56.8
<=48	56.3	38.4	0.2	5.1	61.4
<=50	60.4	34.3	0.4	5.0	65.4
<=52	64.6	30.0	0.4	4.9	69.5
<=54	68.6	26.0	0.5	4.9	73.5
<=56	72.4	22.3	0.6	4.8	77.1
<=59	77.5	17.2	0.7	4.7	82.2
<=62	81.6	13.1	1.0	4.4	85.9
<=65	85.6	9.1	1.3	4.1	89.6
<=68	89.2	5.4	1.7	3.6	92.8
<=73	92.6	2.0	3.0	2.3	95.0
<=100	94.6	0.0	5.4	0.0	94.6

Table 7 (INSTAT-definition \$2.50/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

To mosting a	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	$egin{array}{c} ext{who are} \ ext{targeted} \end{array}$	HHs who are poor	$egin{array}{c} \mathbf{who} \ \mathbf{are} \ \mathbf{targeted} \end{array}$	non-poor HH targeted
<=22	4.9	100.0	5.2	Only poor targeted
<=27	10.7	99.9	11.3	1,473.8:1
<=29	14.3	99.9	15.1	1,963.9:1
<=32	20.2	99.9	21.4	$1,\!117.4:1$
<=34	24.5	99.9	25.9	801.1:1
<=36	28.9	99.8	30.5	615.2:1
<=38	33.3	99.8	35.1	544.1:1
<=40	38.1	99.8	40.2	472.6:1
<=42	42.9	99.7	45.2	341.9:1
<=44	47.4	99.7	49.9	302.8:1
<=46	51.9	99.6	54.6	271.6:1
<=48	56.5	99.6	59.5	253.0:1
<=50	60.7	99.4	63.8	171.8:1
<=52	65.0	99.3	68.3	152.3:1
<=54	69.1	99.3	72.5	145.5:1
<=56	73.0	99.2	76.5	122.5:1
<=59	78.2	99.1	81.9	112.8:1
<=62	82.5	98.8	86.2	84.0:1
<=65	86.9	98.5	90.4	65.4:1
<=68	90.9	98.1	94.2	51.0:1
<=73	95.7	96.8	97.9	30.7:1
<=100	100.0	94.6	100.0	17.7:1

Tables for the INSTAT-Definition 5.00/day 2005 PPP Poverty Line

Table 5 (INSTAT-definition \$5.00/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval $(\pm percentage points)$				
n	Error	90-percent	95-percent	99-percent		
1	-0.4	1.5	5.5	50.0		
4	-0.1	1.9	9.7	20.2		
8	-0.2	4.3	6.5	12.0		
16	-0.3	3.0	4.0	6.9		
32	-0.2	2.4	3.2	4.7		
64	-0.3	1.7	2.1	2.9		
128	-0.2	1.2	1.5	2.0		
256	-0.2	0.9	1.1	1.4		
512	-0.2	0.6	0.8	1.1		
1,024	-0.2	0.5	0.6	0.7		
2,048	-0.2	0.3	0.4	0.5		
4,096	-0.2	0.2	0.3	0.4		
8,192	-0.2	0.2	0.2	0.3		
16,384	-0.2	0.1	0.1	0.2		

Table 6 (INSTAT-definition \$5.00/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	94.2	0.0	0.9	5.8
<=27	10.7	88.3	0.0	0.9	11.7
<=29	14.3	84.8	0.0	0.9	15.2
<=32	20.2	78.9	0.0	0.9	21.1
<=34	24.5	74.6	0.0	0.9	25.4
<=36	28.9	70.2	0.0	0.9	29.8
<=38	33.2	65.8	0.0	0.9	34.2
<=40	38.1	61.0	0.0	0.9	39.0
<=42	42.9	56.2	0.0	0.9	43.8
<=44	47.3	51.7	0.0	0.9	48.2
<=46	51.8	47.3	0.1	0.9	52.7
<=48	56.4	42.6	0.1	0.9	57.3
<=50	60.7	38.4	0.1	0.9	61.5
<=52	65.0	34.1	0.1	0.9	65.8
<=54	69.0	30.0	0.1	0.9	69.9
<=56	72.9	26.2	0.1	0.9	73.7
<=59	78.1	21.0	0.1	0.8	78.9
<=62	82.4	16.7	0.1	0.8	83.2
<=65	86.8	12.3	0.1	0.8	87.5
<=68	90.7	8.4	0.3	0.7	91.4
<=73	95.2	3.8	0.4	0.5	95.7
<=100	99.1	0.0	0.9	0.0	99.1

Table 7 (INSTAT-definition \$5.00/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	who are	HHs who are	who are	non-poor HH targeted
cut-off	$_$ targeted	poor	$_$ targeted	
<=22	4.9	100.0	5.0	Only poor targeted
<=27	10.7	100.0	10.8	Only poor targeted
<=29	14.3	100.0	14.4	Only poor targeted
<=32	20.2	100.0	20.4	4,809.2:1
<=34	24.5	100.0	24.7	$5,\!826.5:1$
<=36	28.9	100.0	29.1	2,072.1:1
<=38	33.3	100.0	33.6	$2,\!385.5:1$
<=40	38.1	100.0	38.5	2,734.5:1
<=42	42.9	99.9	43.3	1,283.9:1
<=44	47.4	99.9	47.8	1,416.6:1
<=46	51.9	99.9	52.3	995.4:1
<=48	56.5	99.9	57.0	1,003.1:1
<=50	60.7	99.9	61.2	1,078.4:1
<=52	65.0	99.9	65.6	$1,\!001.7:1$
<=54	69.1	99.9	69.7	1,064.5:1
<=56	73.0	99.9	73.6	994.8:1
<=59	78.2	99.9	78.8	953.8:1
<=62	82.5	99.9	83.2	681.0:1
<=65	86.9	99.8	87.6	626.5:1
<=68	90.9	99.7	91.5	349.7:1
<=73	95.7	99.5	96.1	219.3:1
<=100	100.0	99.1	100.0	107.1:1

Tables for the INSTAT-Definition $\$8.44/\mathrm{day}\ 2005\ \mathrm{PPP}\ \mathrm{Poverty}\ \mathrm{Line}$

Table 5 (INSTAT-definition \$8.44/day 2005 PPP line):
Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (\pm percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	-0.5	1.3	4.9	4.9		
4	-0.1	1.6	8.4	19.9		
8	-0.2	3.4	5.8	11.6		
16	-0.3	2.8	3.7	6.8		
32	-0.2	2.1	3.1	4.3		
64	-0.2	1.7	2.0	2.9		
128	-0.2	1.1	1.5	2.0		
256	-0.2	0.9	1.1	1.3		
512	-0.2	0.6	0.8	1.0		
1,024	-0.2	0.4	0.5	0.7		
2,048	-0.2	0.3	0.4	0.5		
4,096	-0.2	0.2	0.3	0.3		
8,192	-0.2	0.2	0.2	0.2		
16,384	-0.2	0.1	0.1	0.2		

Table 6 (INSTAT-definition \$8.44/day 2005 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	94.3	0.0	0.8	5.7
<=27	10.7	88.5	0.0	0.8	11.5
<=29	14.3	84.9	0.0	0.8	15.1
<=32	20.2	79.0	0.0	0.8	21.0
<=34	24.5	74.7	0.0	0.8	25.3
<=36	28.9	70.3	0.0	0.8	29.7
<=38	33.3	65.9	0.0	0.8	34.1
<=40	38.1	61.1	0.0	0.8	38.9
<=42	42.9	56.3	0.0	0.8	43.7
<=44	47.4	51.8	0.0	0.8	48.1
<=46	51.8	47.4	0.0	0.8	52.6
<=48	56.4	42.7	0.0	0.8	57.2
<=50	60.7	38.5	0.0	0.8	61.4
<=52	65.0	34.2	0.1	0.8	65.7
<=54	69.1	30.1	0.1	0.8	69.8
<=56	72.9	26.3	0.1	0.7	73.6
<=59	78.1	21.1	0.1	0.7	78.8
<=62	82.4	16.8	0.1	0.7	83.1
<=65	86.8	12.4	0.1	0.7	87.5
<=68	90.7	8.5	0.2	0.6	91.3
<=73	95.3	3.9	0.4	0.4	95.7
<=100	99.2	0.0	0.8	0.0	99.2

Table 7 (INSTAT-definition \$8.44/day 2005 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	$\underline{\hspace{1cm}}$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	
<=22	4.9	100.0	5.0	Only poor targeted
<=27	10.7	100.0	10.8	Only poor targeted
<=29	14.3	100.0	14.4	Only poor targeted
<=32	20.2	100.0	20.4	4,809.2:1
<=34	24.5	100.0	24.7	$5,\!826.5:1$
<=36	28.9	100.0	29.1	$6,\!868.5:1$
<=38	33.3	100.0	33.5	7,907.1:1
<=40	38.1	100.0	38.4	9,063.3:1
<=42	42.9	99.9	43.3	1,811.7:1
<=44	47.4	99.9	47.7	1,998.9:1
< = 46	51.9	99.9	52.2	$1,\!224.4:1$
<=48	56.5	99.9	56.9	1,213.1:1
<=50	60.7	99.9	61.2	1,304.1:1
<=52	65.0	99.9	65.5	$1,\!178.7:1$
<=54	69.1	99.9	69.6	$1,\!252.5:1$
<=56	73.0	99.9	73.5	1,147.3:1
<=59	78.2	99.9	78.7	1,082.5:1
<=62	82.5	99.9	83.1	793.9:1
<=65	86.9	99.9	87.5	725.0:1
<=68	90.9	99.7	91.4	377.1:1
<=73	95.7	99.6	96.0	244.2:1
<=100	100.0	99.2	100.0	122.9:1

Tables for the INSTAT-Definition $$1.90/{\rm day}\ 2011\ {\rm PPP}\ {\rm Poverty\ Line}$

Table 5 (INSTAT-definition \$1.90/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}	-	Confidence interval $(\pm percentage points)$				
n	Error	90-percent	95-percent	99-percent		
1	+1.9	67.7	84.6	93.1		
4	+0.1	32.4	38.2	53.3		
8	-0.1	22.9	27.2	35.1		
16	0.0	16.4	19.5	25.5		
32	0.0	11.3	13.6	16.9		
64	0.0	8.2	9.7	13.3		
128	+0.2	5.7	6.7	8.6		
256	+0.1	4.1	4.8	6.0		
512	0.0	2.8	3.3	4.7		
1,024	0.0	2.0	2.4	3.5		
2,048	0.0	1.4	1.8	2.4		
4,096	0.0	1.1	1.2	1.5		
8,192	0.0	0.7	0.9	1.1		
16,384	0.0	0.5	0.6	0.8		

Table 6 (INSTAT-definition \$1.90/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	63.0	0.0	32.0	37.0
<=27	10.7	57.3	0.1	32.0	42.7
<=29	14.2	53.8	0.2	31.9	46.1
<=32	20.0	47.9	0.2	31.8	51.8
<=34	24.1	43.9	0.5	31.6	55.7
<=36	28.1	39.8	0.8	31.3	59.4
<=38	32.1	35.9	1.2	30.9	63.0
<=40	36.7	31.3	1.5	30.6	67.3
<=42	40.8	27.1	2.1	29.9	70.8
<=44	44.8	23.2	2.6	29.5	74.2
<=46	48.6	19.3	3.3	28.8	77.4
<=48	52.2	15.7	4.2	27.8	80.1
<=50	55.1	12.8	5.6	26.4	81.6
<=52	58.0	10.0	7.1	25.0	82.9
<=54	60.1	7.8	9.0	23.1	83.2
<=56	62.3	5.6	10.6	21.4	83.8
<=59	64.3	3.6	13.8	18.2	82.6
<=62	65.5	2.4	17.0	15.0	80.6
<=65	66.6	1.4	20.3	11.7	78.3
<=68	67.3	0.6	23.6	8.4	75.7
<=73	67.8	0.1	27.9	4.2	72.0
<=100	67.9	0.0	32.1	0.0	67.9

Table 7 (INSTAT-definition \$1.90/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Targeting	% all HHs who are	% targeted HHs who are	% poor HHs who are	Poor HHs targeted per
cut-off	targeted	poor	targeted	non-poor HH targeted
<=22	4.9	99.8	7.2	462.8:1
<=27	10.7	99.4	15.7	155.0:1
<=29	14.3	98.9	20.8	89.1:1
<=32	20.2	98.9	29.4	87.1:1
<=34	24.5	98.2	35.4	53.2:1
<=36	28.9	97.3	41.3	35.4:1
<=38	33.3	96.5	47.2	27.5:1
<=40	38.1	96.2	54.0	25.2:1
<=42	42.9	95.1	60.1	19.3:1
<=44	47.4	94.5	65.9	17.2:1
<=46	51.9	93.7	71.5	14.9:1
< = 48	56.5	92.5	76.9	12.3:1
<=50	60.7	90.8	81.1	9.8:1
< = 52	65.0	89.1	85.3	8.2:1
< = 54	69.1	87.0	88.5	6.7:1
<=56	73.0	85.4	91.7	5.9:1
< = 59	78.2	82.3	94.7	4.6:1
<=62	82.5	79.4	96.4	3.9:1
< = 65	86.9	76.6	98.0	3.3:1
<=68	90.9	74.0	99.0	2.8:1
<=73	95.7	70.9	99.8	2.4:1
<=100	100.0	67.9	100.0	2.1:1

Tables for the INSTAT-Definition 3.20/day 2011 PPP Poverty Line

Table 5 (INSTAT-definition \$3.20/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value					
\mathbf{Size}	-	$\underline{\text{Confidence}}$	\pm interval (\pm percent	age points)			
n	Error	90-percent	$95 ext{-percent}$	99-percent			
1	-0.7	50.0	62.2	75.7			
4	-0.4	24.5	30.5	42.7			
8	-0.8	17.8	22.1	29.6			
16	-0.6	12.4	15.1	20.8			
32	-0.4	9.0	10.8	16.3			
64	-0.3	6.4	7.9	10.7			
128	-0.2	4.4	5.5	6.9			
256	-0.3	3.2	3.8	5.2			
512	-0.3	2.4	2.7	3.7			
1,024	-0.3	1.7	1.9	2.5			
2,048	-0.3	1.1	1.3	1.7			
4,096	-0.3	0.8	0.9	1.2			
8,192	-0.4	0.6	0.7	0.9			
16,384	-0.4	0.4	0.5	0.6			

Table 6 (INSTAT-definition \$3.20/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	82.4	0.0	12.6	17.6
<=27	10.7	76.6	0.0	12.6	23.4
<=29	14.3	73.1	0.0	12.6	26.9
<=32	20.2	67.2	0.0	12.6	32.8
<=34	24.4	62.9	0.1	12.6	37.0
<=36	28.8	58.6	0.1	12.5	41.3
<=38	33.1	54.3	0.2	12.5	45.6
<=40	37.9	49.4	0.2	12.5	50.4
<=42	42.7	44.6	0.2	12.4	55.1
<=44	47.1	40.2	0.3	12.4	59.5
<=46	51.5	35.8	0.4	12.3	63.8
<=48	56.0	31.4	0.5	12.1	68.1
<=50	60.0	27.4	0.7	11.9	71.9
<=52	64.0	23.3	1.0	11.7	75.7
<=54	67.7	19.6	1.4	11.3	79.0
<=56	71.1	16.3	1.9	10.8	81.8
<=59	75.6	11.7	2.6	10.1	85.7
<=62	78.9	8.4	3.6	9.0	87.9
<=65	82.0	5.3	4.9	7.8	89.8
<=68	84.5	2.8	6.4	6.2	90.7
<=73	86.5	0.8	9.2	3.5	90.0
<=100	87.4	0.0	12.6	0.0	87.4

Table 7 (INSTAT-definition \$3.20/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	$\begin{array}{c} \text{who are} \\ \text{targeted} \end{array}$	HHs who are	$\begin{array}{c} \text{who are} \\ \text{targeted} \end{array}$	non-poor HH targeted
<=22	4.9	<u>poor</u> 100.0		Only poor torreted
			5.6	Only poor targeted
<=27	10.7	99.9	12.3	1,473.8:1
<=29	14.3	99.8	16.3	442.1:1
<=32	20.2	99.8	23.1	468.3:1
<=34	24.5	99.7	28.0	365.7:1
<=36	28.9	99.6	32.9	251.7:1
<=38	33.3	99.5	37.9	205.3:1
<=40	38.1	99.5	43.4	210.0:1
< = 42	42.9	99.5	48.9	189.5:1
<=44	47.4	99.4	53.9	176.3:1
<=46	51.9	99.3	59.0	145.5:1
<=48	56.5	99.1	64.1	104.9:1
<=50	60.7	98.8	68.7	80.6:1
<=52	65.0	98.5	73.3	64.7:1
<=54	69.1	98.0	77.5	49.4:1
<=56	73.0	97.4	81.4	37.7:1
<=59	78.2	96.7	86.6	29.6:1
<=62	82.5	95.6	90.3	21.8:1
<=65	86.9	94.4	93.9	16.9:1
<=68	90.9	92.9	96.8	13.2:1
<=73	95.7	90.4	99.0	9.4:1
<=100	100.0	87.4	100.0	6.9:1

Tables for the INSTAT-Definition $5.50/day\ 2011\ PPP\ Poverty\ Line$

Table 5 (INSTAT-definition \$5.50/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between	estimate and obser	ved value		
\mathbf{Size}		Confidence interval (\pm percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	-1.0	9.4	44.5	68.1		
4	-0.6	14.7	19.3	33.3		
8	-0.7	10.5	13.1	18.9		
16	-0.8	7.3	9.0	12.9		
32	-0.7	5.4	6.3	9.0		
64	-0.6	3.5	4.5	6.0		
128	-0.5	2.7	3.3	4.3		
256	-0.5	1.9	2.3	3.0		
512	-0.5	1.3	1.6	2.1		
1,024	-0.5	1.0	1.1	1.5		
2,048	-0.5	0.7	0.8	1.0		
4,096	-0.5	0.5	0.5	0.7		
8,192	-0.6	0.3	0.4	0.5		
16,384	-0.6	0.2	0.3	0.4		

Table 6 (INSTAT-definition \$5.50/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	<u>Inclusion:</u>	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	${f mistakenly}$	$\operatorname{correctly}$	+
$\operatorname{cut-off}$	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	91.6	0.0	3.5	8.4
<=27	10.7	85.8	0.0	3.4	14.2
<=29	14.3	82.2	0.0	3.4	17.8
<=32	20.2	76.3	0.0	3.4	23.6
<=34	24.5	72.1	0.0	3.4	27.9
<=36	28.8	67.7	0.0	3.4	32.3
<=38	33.2	63.3	0.0	3.4	36.6
<=40	38.1	58.5	0.0	3.4	41.5
<=42	42.9	53.7	0.1	3.4	46.2
<=44	47.3	49.3	0.1	3.4	50.6
<=46	51.7	44.8	0.1	3.3	55.1
<=48	56.4	40.2	0.1	3.3	59.7
<=50	60.6	36.0	0.2	3.3	63.8
<=52	64.8	31.7	0.2	3.2	68.1
<=54	68.9	27.6	0.2	3.2	72.1
<=56	72.7	23.8	0.2	3.2	76.0
< = 59	77.9	18.6	0.3	3.2	81.1
<=62	82.1	14.5	0.4	3.0	85.1
<=65	86.3	10.2	0.6	2.9	89.2
<=68	90.1	6.4	0.8	2.6	92.8
<=73	94.0	2.6	1.7	1.7	95.7
<=100	96.5	0.0	3.5	0.0	96.5

Table 7 (INSTAT-definition \$5.50/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

Townsting	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{array}{c} ext{Targeting} \ ext{cut-off} \end{array}$	$egin{array}{c} ext{who are} \ ext{targeted} \end{array}$	HHs who are poor	$egin{array}{c} \mathbf{who} \ \mathbf{are} \ \mathbf{targeted} \end{array}$	non-poor HH targeted
<=22	4.9	100.0	5.1	Only poor targeted
<=27	10.7	99.9	11.1	1,473.8:1
<=29	14.3	99.9	14.8	1,963.9:1
<=32	20.2	99.9	20.9	1,117.4:1
<=34	24.5	99.9	25.4	801.1:1
<=36	28.9	99.9	29.9	716.1:1
<=38	33.3	99.9	34.4	824.6:1
<=40	38.1	99.9	39.4	945.3:1
<=42	42.9	99.8	44.4	527.6:1
<=44	47.4	99.8	49.0	538.3:1
<=46	51.9	99.8	53.6	423.7:1
<=48	56.5	99.8	58.4	418.2:1
<=50	60.7	99.7	62.7	351.2:1
<=52	65.0	99.7	67.2	316.3:1
<=54	69.1	99.7	71.4	336.1:1
<=56	73.0	99.7	75.3	326.6:1
<=59	78.2	99.7	80.7	295.8:1
<=62	82.5	99.5	85.0	182.6:1
<=65	86.9	99.3	89.4	152.6:1
<=68	90.9	99.1	93.3	110.0:1
<=73	95.7	98.2	97.3	55.0:1
<=100	100.0	96.5	100.0	28.0:1

Tables for the INSTAT-Definition $$21.70/{\rm day}\ 2011$ PPP Poverty Line

Table 5 (INSTAT-definition \$21.70/day 2011 PPP line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value					
\mathbf{Size}	-	Confidence interval (±percentage points)					
n	Error	90-percent	95-percent	99-percent			
1	0.0	0.4	0.6	0.6			
4	0.0	0.3	0.3	9.8			
8	0.0	0.2	0.2	5.6			
16	0.0	0.1	0.3	5.4			
32	0.0	0.3	1.2	3.2			
64	0.0	0.7	1.5	1.7			
128	0.0	0.8	0.8	1.4			
256	0.0	0.4	0.6	0.8			
512	0.0	0.3	0.4	0.5			
1,024	0.0	0.2	0.3	0.3			
2,048	0.0	0.2	0.2	0.2			
4,096	0.0	0.1	0.1	0.2			
8,192	0.0	0.1	0.1	0.1			
16,384	0.0	0.1	0.1	0.1			

Table 6 (INSTAT-definition \$21.70/day 2011 PPP line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	${f not\ targeted}$	${f targeted}$	not targeted	Exclusion
<=22	4.9	94.9	0.0	0.2	5.1
<=27	10.7	89.1	0.0	0.2	10.9
<=29	14.3	85.5	0.0	0.2	14.5
<=32	20.2	79.6	0.0	0.2	20.4
<=34	24.5	75.3	0.0	0.2	24.7
<=36	28.9	70.9	0.0	0.2	29.1
< = 38	33.3	66.6	0.0	0.2	33.4
<=40	38.1	61.7	0.0	0.2	38.3
<=42	42.9	56.9	0.0	0.2	43.1
<=44	47.4	52.5	0.0	0.2	47.5
<=46	51.8	48.0	0.0	0.1	52.0
<=48	56.5	43.4	0.0	0.1	56.6
<=50	60.7	39.1	0.0	0.1	60.8
<=52	65.0	34.8	0.0	0.1	65.1
< = 54	69.1	30.8	0.0	0.1	69.2
< = 56	72.9	26.9	0.0	0.1	73.1
< = 59	78.1	21.7	0.0	0.1	78.3
<=62	82.5	17.3	0.0	0.1	82.6
<=65	86.9	13.0	0.0	0.1	87.0
<=68	90.9	9.0	0.1	0.1	90.9
< = 73	95.6	4.3	0.1	0.1	95.6
<=100	99.8	0.0	0.2	0.0	99.8

Table 7 (INSTAT-definition \$21.70/day 2011 PPP line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
$egin{argainst} ext{Targeting} \ ext{cut-off} \ \end{matrix}$	who are	HHs who are	who are	non-poor HH targeted
<=22	$\frac{\mathbf{targeted}}{4.9}$	<u>poor</u> 100.0	$\frac{\mathbf{targeted}}{4.9}$	Only poor torgeted
				Only poor targeted
<=27	10.7	100.0	10.8	Only poor targeted
<=29	14.3	100.0	14.3	Only poor targeted
<=32	20.2	100.0	20.3	Only poor targeted
<=34	24.5	100.0	24.6	Only poor targeted
<=36	28.9	100.0	28.9	Only poor targeted
<=38	33.3	100.0	33.3	Only poor targeted
<=40	38.1	100.0	38.2	Only poor targeted
<=42	42.9	100.0	43.0	$2,\!203.0:1$
<=44	47.4	100.0	47.4	$2,\!430.5:1$
<=46	51.9	99.9	51.9	$1,\!359.6:1$
<=48	56.5	99.9	56.6	1,481.0:1
<=50	60.7	99.9	60.8	$1,\!592.1:1$
<=52	65.0	99.9	65.1	$1,\!620.0:1$
<=54	69.1	99.9	69.2	1,721.4:1
< = 56	73.0	99.9	73.1	1,817.7:1
< = 59	78.2	99.9	78.3	$1,\!854.7:1$
<=62	82.5	99.9	82.6	1,868.9:1
<=65	86.9	99.9	87.0	1,968.0:1
<=68	90.9	99.9	91.0	999.5:1
<=73	95.7	99.9	95.7	935.8:1
<=100	100.0	99.8	100.0	550.8:1

${\it Tables~for} \\ the~INSTAT-Definition \\ First-Decile~(10^{th}\text{-percentile})~Poverty~Line \\$

Table 5 (INSTAT-definition first-decile, 10th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value					
\mathbf{Size}		Confidence interval $(\pm percentage points)$					
n	Error	90-percent	95-percent	99-percent			
1	+0.5	45.6	63.5	69.1			
4	+0.6	20.5	25.1	36.5			
8	+0.8	13.3	16.6	23.8			
16	+0.8	9.6	12.0	17.8			
32	+0.9	6.9	8.3	10.7			
64	+0.9	4.9	5.9	7.9			
128	+0.9	3.4	4.1	5.4			
256	+0.9	2.3	2.8	3.5			
512	+0.8	1.7	2.0	2.7			
1,024	+0.9	1.2	1.4	1.9			
2,048	+0.9	0.9	1.0	1.4			
4,096	+0.9	0.6	0.7	0.9			
8,192	+0.9	0.4	0.5	0.7			
16,384	+0.9	0.3	0.4	0.4			

Table 6 (INSTAT-definition first-decile, 10th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	Leakage:	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	${f mistakenly}$	mistakenly	$\operatorname{correctly}$	+
cut-off	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	1.8	4.9	3.1	90.2	92.0
<=27	3.3	3.4	7.5	85.8	89.1
<=29	3.9	2.8	10.4	82.9	86.9
<=32	4.8	1.9	15.4	77.9	82.6
<=34	5.2	1.5	19.3	74.0	79.2
<=36	5.5	1.2	23.3	69.9	75.5
<=38	5.8	0.9	27.5	65.8	71.6
<=40	6.1	0.6	32.1	61.2	67.3
<=42	6.2	0.5	36.7	56.6	62.8
<=44	6.3	0.4	41.0	52.3	58.6
<=46	6.5	0.3	45.4	47.9	54.3
<=48	6.5	0.2	50.0	43.3	49.8
<=50	6.6	0.1	54.2	39.1	45.7
<=52	6.6	0.1	58.4	34.9	41.5
<=54	6.6	0.1	62.5	30.8	37.5
<=56	6.7	0.0	66.3	27.0	33.6
<=59	6.7	0.0	71.5	21.8	28.5
<=62	6.7	0.0	75.8	17.5	24.2
<=65	6.7	0.0	80.2	13.1	19.8
<=68	6.7	0.0	84.2	9.1	15.8
<=73	6.7	0.0	89.0	4.3	11.0
<=100	6.7	0.0	93.3	0.0	6.7

Table 7 (INSTAT-definition first-decile, 10th-percentile line):
Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Door HUg tormated nor
Targeting	who are	HHs who are	who are	Poor HHs targeted per non-poor HH targeted
cut-off	targeted	poor	$_$ targeted	mon-poor HH targeted
<=22	4.9	36.9	27.0	0.6:1
<=27	10.7	30.5	48.9	0.4:1
<=29	14.3	27.5	58.7	0.4:1
<=32	20.2	23.7	71.4	0.3:1
<=34	24.5	21.2	77.4	0.3:1
<=36	28.9	19.2	82.6	0.2:1
<=38	33.3	17.4	86.1	0.2:1
<=40	38.1	15.9	90.4	0.2:1
< = 42	42.9	14.5	92.9	0.2:1
<=44	47.4	13.4	94.6	0.2:1
<=46	51.9	12.4	96.2	0.1:1
<=48	56.5	11.5	96.6	0.1:1
<=50	60.7	10.8	98.0	0.1:1
< = 52	65.0	10.1	98.4	0.1:1
< = 54	69.1	9.6	99.1	0.1:1
< = 56	73.0	9.1	99.3	0.1:1
< = 59	78.2	8.6	99.9	0.1:1
<=62	82.5	8.1	100.0	0.1:1
< = 65	86.9	7.7	100.0	0.1:1
<=68	90.9	7.4	100.0	0.1:1
< = 73	95.7	7.0	100.0	0.1:1
<=100	100.0	6.7	100.0	0.1:1

Table 5 (INSTAT-definition first-quintile, 20th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample Difference between estimate and observed value						
\mathbf{Size}	$\underline{\text{Confidence interval } (\pm \text{percentage points})}$					
n	Error	90-percent	95-percent	99-percent		
1	+1.0	53.8	68.1	80.9		
4	+1.2	26.3	33.5	50.3		
8	+1.4	19.2	23.2	33.7		
16	+1.1	13.2	16.7	22.5		
32	+1.1	9.5	11.5	15.2		
64	+0.9	6.6	8.0	10.8		
128	+0.9	4.7	5.6	7.6		
256	+1.0	3.3	4.0	5.1		
512	+0.9	2.3	2.8	3.7		
1,024	+1.0	1.7	2.0	2.5		
2,048	+1.0	1.1	1.4	1.8		
4,096	+1.0	0.8	1.0	1.3		
8,192	+1.0	0.6	0.7	0.9		
16,384	+1.0	0.4	0.5	0.6		

Table 6 (INSTAT-definition first-quintile, 20th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\stackrel{ ext{mistakenly}}{ ext{mistakenly}}$	correctly	+
cut-off	$\operatorname{targeted}$	not targeted	targeted	not targeted	Exclusion
<=22	3.4	10.7	1.5	84.4	87.8
<=27	6.2	7.9	4.6	81.4	87.6
<=29	7.4	6.6	6.9	79.1	86.5
<=32	9.2	4.9	11.0	74.9	84.1
<=34	10.1	3.9	14.4	71.6	81.7
<=36	10.9	3.1	18.0	68.0	78.9
<=38	11.6	2.4	21.6	64.3	75.9
<=40	12.4	1.7	25.7	60.2	72.6
<=42	12.8	1.3	30.2	55.8	68.6
<=44	13.1	1.0	34.3	51.7	64.7
<=46	13.3	0.8	38.6	47.4	60.7
<=48	13.4	0.6	43.0	42.9	56.3
<=50	13.6	0.5	47.1	38.8	52.4
<=52	13.7	0.4	51.4	34.6	48.2
<=54	13.8	0.3	55.3	30.6	44.4
<=56	13.9	0.2	59.1	26.8	40.7
<=59	14.0	0.1	64.2	21.8	35.8
<=62	14.0	0.0	68.5	17.4	31.5
<=65	14.0	0.0	72.9	13.1	27.1
<=68	14.1	0.0	76.9	9.1	23.1
<=73	14.1	0.0	81.6	4.3	18.4
<=100	14.1	0.0	85.9	0.0	14.1

Table 7 (INSTAT-definition first-quintile, 20th-percentile line):
Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per non-poor HH targeted	
Targeting	\mathbf{w} ho are	HHs who are	who are		
cut-off	$_{ m targeted}$	poor	targeted		
<=22	4.9	68.9	24.1	2.2:1	
<=27	10.7	57.6	44.1	1.4:1	
<=29	14.3	51.9	52.9	1.1:1	
<=32	20.2	45.5	65.5	0.8:1	
<=34	24.5	41.4	72.2	0.7:1	
<=36	28.9	37.8	77.6	0.6:1	
<=38	33.3	35.0	82.7	0.5:1	
<=40	38.1	32.5	88.2	0.5:1	
< = 42	42.9	29.8	90.9	0.4:1	
<=44	47.4	27.6	93.1	0.4:1	
<=46	51.9	25.7	94.7	0.3:1	
<=48	56.5	23.8	95.6	0.3:1	
<=50	60.7	22.4	96.7	0.3:1	
< = 52	65.0	21.0	97.3	0.3:1	
<=54	69.1	19.9	97.9	0.2:1	
< = 56	73.0	19.0	98.6	0.2:1	
< = 59	78.2	17.9	99.6	0.2:1	
<=62	82.5	17.0	99.8	0.2:1	
< = 65	86.9	16.2	99.9	0.2:1	
<=68	90.9	15.5	100.0	0.2:1	
<=73	95.7	14.7	100.0	0.2:1	
<=100	100.0	14.1	100.0	0.2:1	

Tables for the INSTAT-Definition Second-Quintile ($40^{ ext{th}}$ -percentile) Poverty Line

Table 5 (INSTAT-definition second-quintile, 40th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample	Difference between estimate and observed value					
\mathbf{Size}		Confidence interval (\pm percentage points)				
n	Error	90-percent	$95 ext{-percent}$	99-percent		
1	+0.6	64.1	73.7	86.0		
4	-0.1	35.3	41.6	53.5		
8	+1.0	25.5	30.5	38.0		
16	+1.1	17.4	21.2	27.9		
32	+1.1	12.5	15.2	19.6		
64	+0.7	9.2	10.6	13.5		
128	+0.8	6.3	7.4	9.9		
256	+0.7	4.4	5.1	6.8		
512	+0.7	3.2	3.7	4.7		
1,024	+0.8	2.2	2.7	3.5		
2,048	+0.8	1.6	1.9	2.4		
4,096	+0.8	1.1	1.2	1.6		
8,192	+0.8	0.7	0.9	1.2		
16,384	+0.8	0.5	0.6	0.9		

Table 6 (INSTAT-definition second-quintile, 40th-percentile line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\overline{ ext{mistakenly}}$	correctly	+
$\operatorname{\mathbf{cut}}$ - $\operatorname{\mathbf{off}}$	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	4.5	26.1	0.4	69.0	73.5
<=27	9.2	21.4	1.5	67.8	77.0
<=29	11.6	19.0	2.7	66.6	78.2
<=32	15.4	15.2	4.8	64.5	79.9
<=34	17.8	12.8	6.7	62.7	80.5
<=36	20.1	10.6	8.8	60.5	80.6
<=38	22.0	8.7	11.3	58.1	80.1
<=40	23.9	6.7	14.2	55.2	79.1
<=42	25.5	5.2	17.5	51.9	77.3
<=44	26.6	4.1	20.8	48.6	75.2
<=46	27.6	3.0	24.2	45.1	72.8
<=48	28.3	2.3	28.2	41.2	69.5
<=50	28.9	1.7	31.8	37.6	66.4
<=52	29.3	1.3	35.7	33.6	62.9
<=54	29.8	0.9	39.3	30.0	59.8
<=56	30.0	0.6	42.9	26.4	56.5
< = 59	30.4	0.3	47.8	21.6	52.0
<=62	30.5	0.1	52.0	17.4	47.9
<=65	30.6	0.0	56.3	13.1	43.7
<=68	30.6	0.0	60.3	9.1	39.7
< = 73	30.6	0.0	65.0	4.3	35.0
<=100	30.6	0.0	69.4	0.0	30.6

Table 7 (INSTAT-definition second-quintile, 40th-percentile line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	who are	HHs who are	who are	non-poor HH targeted
cut-off	$\underline{\hspace{1cm}}$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	
=22	4.9	91.9	14.8	11.3:1
<=27	10.7	85.6	30.0	6.0:1
<=29	14.3	80.9	37.8	4.2:1
<=32	20.2	76.1	50.3	3.2:1
<=34	24.5	72.7	58.2	2.7:1
<=36	28.9	69.4	65.5	2.3:1
<=38	33.3	66.1	71.7	1.9:1
<=40	38.1	62.7	78.1	1.7:1
<=42	43.0	59.3	83.1	1.5:1
<=44	47.4	56.1	86.7	1.3:1
<=46	51.8	53.3	90.2	1.1:1
<=48	56.5	50.1	92.4	1.0:1
<=50	60.7	47.6	94.3	0.9:1
<=52	65.0	45.1	95.6	0.8:1
<=54	69.1	43.1	97.2	0.8:1
<=56	73.0	41.2	98.0	0.7:1
<=59	78.2	38.9	99.2	0.6:1
<=62	82.5	37.0	99.6	0.6:1
<=65	86.9	35.2	99.9	0.5:1
<=68	90.9	33.7	100.0	0.5:1
<=73	95.7	32.0	100.0	0.5:1
<=100	100.0	30.6	100.0	0.4:1

Tables for the INSTAT-Definition Median ($50^{ ext{th}}$ -percentile) Poverty Line

Table 5 (INSTAT-definition median, 50th-percentile line):
Errors in estimated poverty rates for a sample of a
population of participants' households at a point in time
(average of differences between estimated and observed
values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		$\underline{\text{Confidence}}$	\pm interval (\pm percent	age points)		
n	Error	90-percent	$95 ext{-percent}$	99-percent		
1	+1.4	70.0	78.5	90.2		
4	+0.4	33.6	42.6	58.0		
8	+0.5	25.0	30.4	39.3		
16	+0.7	18.4	21.5	28.4		
32	+0.6	13.2	15.8	20.0		
64	+0.3	9.1	10.5	13.3		
128	+0.5	6.2	7.6	9.6		
256	+0.4	4.6	5.3	7.1		
512	+0.4	3.4	4.1	5.4		
1,024	+0.4	2.3	2.9	3.6		
2,048	+0.4	1.7	1.9	2.6		
4,096	+0.4	1.2	1.4	1.8		
8,192	+0.4	0.8	1.0	1.3		
16,384	+0.4	0.6	0.7	0.9		

Table 6 (INSTAT-definition median, 50th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	<u>Hit rate</u>
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	$\operatorname{correctly}$	mistakenly	${f mistakenly}$	$\operatorname{correctly}$	+
cut-off	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	4.7	35.0	0.2	60.1	64.8
<=27	9.9	29.8	0.9	59.5	69.3
<=29	12.7	27.0	1.6	58.7	71.5
<=32	17.2	22.5	3.1	57.3	74.4
<=34	20.3	19.4	4.2	56.1	76.4
<=36	23.4	16.3	5.5	54.8	78.2
<=38	25.8	13.9	7.4	52.9	78.7
<=40	28.5	11.2	9.6	50.7	79.2
<=42	30.9	8.8	12.1	48.2	79.1
<=44	32.5	7.1	14.8	45.5	78.0
<=46	34.2	5.5	17.7	42.7	76.8
<=48	35.4	4.3	21.1	39.2	74.6
<=50	36.4	3.2	24.3	36.0	72.5
<=52	37.4	2.3	27.7	32.6	70.0
<=54	38.1	1.6	31.0	29.3	67.3
<=56	38.7	1.0	34.2	26.1	64.8
< = 59	39.3	0.4	38.9	21.4	60.6
<=62	39.4	0.2	43.1	17.2	56.7
<=65	39.6	0.1	47.3	13.0	52.6
<=68	39.7	0.0	51.3	9.0	48.7
<=73	39.7	0.0	56.0	4.3	44.0
<=100	39.7	0.0	60.3	0.0	39.7

Table 7 (INSTAT-definition median, 50th-percentile line): Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
${f Targeting}$	who are	HHs who are	who are	non-poor HH targeted
cut-off	$\underline{\hspace{1cm}}$ targeted	poor	$\underline{\hspace{1cm}}$ targeted	
<=22	4.9	95.4	11.8	20.8:1
<=27	10.7	91.9	24.9	11.3:1
<=29	14.3	88.9	32.1	8.0:1
<=32	20.2	84.9	43.3	5.6:1
<=34	24.5	82.8	51.1	4.8:1
<=36	28.9	81.0	59.0	4.3:1
<=38	33.3	77.7	65.1	3.5:1
<=40	38.1	74.8	71.8	3.0:1
< = 42	42.9	71.8	77.8	2.6:1
<=44	47.4	68.7	82.0	2.2:1
<=46	51.9	65.9	86.2	1.9:1
<=48	56.5	62.6	89.2	1.7:1
<=50	60.7	60.0	91.9	1.5:1
<=52	65.0	57.4	94.1	1.3:1
<=54	69.1	55.1	95.9	1.2:1
<=56	73.0	53.1	97.6	1.1:1
<=59	78.2	50.2	98.9	1.0:1
<=62	82.5	47.8	99.4	0.9:1
<=65	86.9	45.6	99.8	0.8:1
<=68	90.9	43.6	100.0	0.8:1
<=73	95.7	41.5	100.0	0.7:1
<=100	100.0	39.7	100.0	0.7:1

$Tables\ for$ the INSTAT-Definition $Third\mbox{-}Quintile\ (60^{\mbox{\tiny th}}\mbox{-}percentile)\ Poverty\ Line$

Table 5 (INSTAT-definition third-quintile, 60th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample		Difference between estimate and observed value				
\mathbf{Size}		Confidence interval (\pm percentage points)				
n	Error	90-percent	95-percent	99-percent		
1	+1.9	66.8	75.8	89.6		
4	-0.6	36.4	43.1	59.0		
8	-0.6	24.3	28.9	36.6		
16	-0.5	17.4	20.8	25.7		
32	-0.6	11.8	14.2	19.2		
64	-0.7	8.9	10.8	14.0		
128	-0.5	6.1	7.4	9.9		
256	-0.7	4.4	5.3	7.0		
512	-0.7	3.1	3.6	5.4		
1,024	-0.6	2.3	2.7	3.6		
2,048	-0.6	1.6	1.9	2.4		
4,096	-0.6	1.1	1.3	1.7		
8,192	-0.6	0.8	0.9	1.2		
16,384	-0.6	0.6	0.7	0.9		

Table 6 (INSTAT-definition third-quintile, 60th-percentile line):
Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	<u>Inclusion:</u> Poor	<u>Undercoverage:</u> Poor	<u>Leakage:</u> Non-poor	<u>Exclusion:</u> Non-poor	<u>Hit rate</u> Inclusion
Targeting	correctly	mistakenly	mistakenly	correctly	+
cut-off	$ ext{targeted}$	not targeted	targeted	not targeted	Exclusion
<=22	4.9	44.9	0.1	50.2	55.1
<=27	10.5	39.2	0.3	50.0	60.5
<=29	13.8	35.9	0.5	49.7	63.5
<=32	18.8	30.9	1.4	48.9	67.7
<=34	22.4	27.3	2.1	48.2	70.6
<=36	25.9	23.8	2.9	47.3	73.3
<=38	29.2	20.6	4.1	46.2	75.3
<=40	32.8	16.9	5.4	44.9	77.7
<=42	35.9	13.9	7.1	43.2	79.1
<=44	38.3	11.4	9.0	41.3	79.6
<=46	40.7	9.0	11.2	39.1	79.8
<=48	42.8	7.0	13.7	36.6	79.3
<=50	44.5	5.2	16.2	34.1	78.5
<=52	46.0	3.8	19.1	31.2	77.2
<=54	47.1	2.6	22.0	28.3	75.3
<=56	48.0	1.7	25.0	25.3	73.3
< = 59	48.7	1.0	29.4	20.8	69.6
<=62	49.1	0.6	33.4	16.9	66.0
<=65	49.4	0.3	37.5	12.8	62.2
<=68	49.6	0.2	41.4	8.9	58.5
<=73	49.7	0.0	46.0	4.3	54.0
<=100	49.7	0.0	50.3	0.0	49.7

Table 7 (INSTAT-definition third-quintile, 60th-percentile line):
Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	$\mathbf{who} \ \mathbf{are}$	HHs who are	who are	non-poor HH targeted
cut-off	$_$ targeted	poor	$_$ targeted	mon-poor iiii targeted
<=22	4.9	98.7	9.8	74.8:1
<=27	10.7	97.5	21.1	39.2:1
<=29	14.3	96.2	27.7	25.1:1
<=32	20.2	93.1	37.9	13.5:1
<=34	24.5	91.4	45.1	10.7:1
<=36	28.9	89.8	52.2	8.8:1
<=38	33.3	87.7	58.6	7.1:1
<=40	38.1	86.0	65.9	6.1:1
<=42	42.9	83.5	72.1	5.1:1
<=44	47.4	80.9	77.1	4.2:1
<=46	51.9	78.4	81.8	3.6:1
<=48	56.5	75.7	86.0	3.1:1
<=50	60.7	73.3	89.5	2.7:1
< = 52	65.0	70.7	92.4	2.4:1
<=54	69.1	68.1	94.7	2.1:1
<=56	73.0	65.8	96.6	1.9:1
<=59	78.2	62.3	98.0	1.7:1
<=62	82.5	59.5	98.8	1.5:1
<=65	86.9	56.8	99.3	1.3:1
<=68	90.9	54.5	99.7	1.2:1
<=73	95.7	51.9	100.0	1.1:1
<=100	100.0	49.7	100.0	1.0:1

Table 5 (INSTAT-definition fourth-quintile, 80th-percentile line): Errors in estimated poverty rates for a sample of a population of participants' households at a point in time (average of differences between estimated and observed values), by sample size and with confidence intervals

Sample	Difference between estimate and observed value					
\mathbf{Size}		Confidence interval (±percentage points)				
<i>n</i>	Error	90-percent	95-percent	99-percent		
1	+1.8	68.1	80.9	91.4		
4	-0.4	30.9	38.5	51.6		
8	-0.8	22.9	27.2	36.0		
16	-0.4	15.6	18.5	23.9		
32	-0.4	11.3	13.3	17.2		
64	-0.3	8.0	9.4	13.1		
128	-0.1	5.5	6.6	8.6		
256	-0.2	3.8	4.6	6.4		
512	-0.2	2.9	3.4	4.1		
1,024	-0.2	2.0	2.3	3.1		
2,048	-0.2	1.5	1.7	2.2		
4,096	-0.2	1.0	1.2	1.4		
8,192	-0.3	0.7	0.9	1.1		
16,384	-0.3	0.5	0.6	0.7		

Table 6 (INSTAT-definition fourth-quintile, 80th-percentile line): Percentages of participants' households by cut-off score and targeting classification, along with the hit rate

	Inclusion:	<u>Undercoverage:</u>	<u>Leakage:</u>	Exclusion:	Hit rate
	Poor	Poor	Non-poor	Non-poor	Inclusion
Targeting	correctly	${f mistakenly}$	$\overline{ ext{mistakenly}}$	correctly	+
$\operatorname{\mathbf{cut}}$ - $\operatorname{\mathbf{off}}$	${f targeted}$	not targeted	${f targeted}$	not targeted	Exclusion
<=22	4.9	67.0	0.0	28.1	33.0
<=27	10.7	61.2	0.1	28.1	38.7
<=29	14.2	57.7	0.1	28.0	42.1
<=32	20.0	51.9	0.2	27.9	47.9
<=34	24.1	47.7	0.4	27.8	51.9
<=36	28.3	43.6	0.6	27.5	55.8
<=38	32.4	39.5	0.9	27.3	59.7
<=40	37.0	34.8	1.1	27.1	64.1
<=42	41.3	30.5	1.6	26.5	67.8
<=44	45.4	26.4	1.9	26.2	71.6
<=46	49.4	22.4	2.4	25.7	75.1
<=48	53.3	18.6	3.2	24.9	78.2
<=50	56.5	15.4	4.3	23.9	80.3
<=52	59.7	12.2	5.4	22.8	82.4
<=54	62.2	9.7	6.9	21.2	83.4
<=56	64.7	7.2	8.3	19.8	84.5
< = 59	67.3	4.6	10.9	17.3	84.6
<=62	68.8	3.1	13.8	14.4	83.1
<=65	70.2	1.7	16.7	11.4	81.6
<=68	71.0	0.9	19.9	8.2	79.2
<=73	71.7	0.2	24.0	4.2	75.9
<=100	71.9	0.0	28.1	0.0	71.9

Table 7 (INSTAT-definition fourth-quintile, 80th-percentile line):
Share of all participants' households who are targeted (that is, score at or below a cut-off), share of targeted households who are poor, share of poor households who are targeted, and number of poor households successfully targeted per non-poor household mistakenly targeted

	% all HHs	% targeted	% poor HHs	Poor HHs targeted per
Targeting	who are	HHs who are	who are	non-poor HH targeted
cut-off	$_$ targeted	poor	$__$ targeted	mon-poor IIII targeted
<=22	4.9	99.8	6.8	462.8:1
<=27	10.7	99.4	14.9	164.2:1
<=29	14.3	99.0	19.7	96.1:1
<=32	20.2	99.0	27.9	94.8:1
<=34	24.5	98.5	33.6	64.3:1
<=36	28.9	97.9	39.3	46.3:1
<=38	33.3	97.4	45.1	37.6:1
<=40	38.1	97.2	51.5	34.6:1
< = 42	42.9	96.2	57.5	25.6:1
<=44	47.4	95.9	63.2	23.5:1
<=46	51.9	95.3	68.8	20.4:1
<=48	56.5	94.3	74.1	16.6:1
<=50	60.7	93.0	78.5	13.2:1
<=52	65.0	91.7	83.0	11.1:1
<=54	69.1	90.0	86.5	9.0:1
<=56	73.0	88.6	90.0	7.8:1
<=59	78.2	86.1	93.6	6.2:1
<=62	82.5	83.3	95.7	5.0:1
<=65	86.9	80.8	97.7	4.2:1
<=68	90.9	78.1	98.8	3.6:1
<=73	95.7	75.0	99.8	3.0:1
<=100	100.0	71.9	100.0	2.6:1