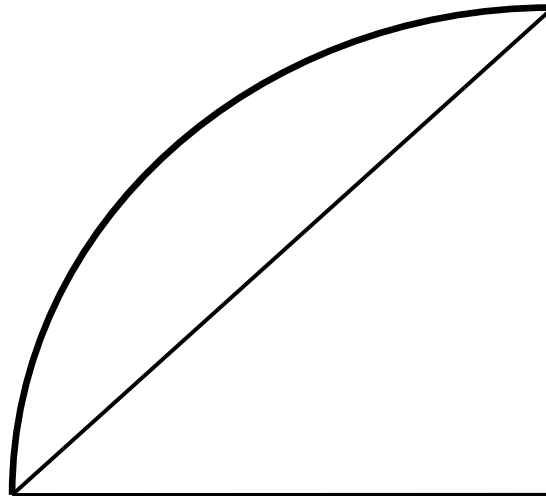


How to Apply Poverty Scoring in Myanmar



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Objectives

- Learn why UNDP uses poverty scoring
- See where poverty scorecard comes from
- Understand how scoring works
- Review 'Guidelines to Interpretation'
- Discuss operational processes for sampling, data-entry, and targeting exceptions

Why Use Poverty Scoring?

To estimate **likelihood** that household consumption is below an objective poverty line with known accuracy based on verifiable data that is quick and inexpensive to collect.

To assess/report/improve social performance:

1. % of participants below poverty line now
2. Change in % below line over time
3. Target services to poorer households

**Simple, quick, low-cost, quantitative, and often
'good enough for govt. work'**

Simple Poverty Scorecard Coverage

Bangladesh	Guatemala	Myanmar	Senegal
Bolivia	Haiti	Nepal	Sierra Leone
Brazil	Honduras	Nicaragua	South Africa
Burkina Faso	India	Nigeria	Sri Lanka
Cambodia	Indonesia	Pakistan	Syria
China	Jordan	Palestine	Tanzania
Colombia	Kenya	Peru	Timor-Leste
Dominican Rep.	Malawi	Philippines	Uganda
Ecuador	Mali	Romania	Vietnam
El Salvador	Mexico	Rwanda	Yemen
Ethiopia	Morocco	Russia	
Ghana	Mozambique		

90% of people below \$1.25/day
live in the 45 countries with a Simple Poverty Scorecard

Poverty Scoring versus Wealth Ranking

Scoring:

- Narrow definition of poverty (consumption)
- Works with broad patterns and on average
- Based on IHCLA survey data, has known accuracy
- One standard for entire Union
- Quantitative and consistent, so comparable across villages and over time
- Requires skilled enumerator

Wealth Ranking:

- Comprehensive definition of poverty
- Can adjust for exceptional cases
- Based on community judgment, participatory
- Different standard each community
- Subjective, non-comparable, unknown accuracy
- Requires skilled facilitator

IHLCA Measure of Poverty Is Costly

Exhaustive household expenditure survey

Last week, did you eat carrots? How many?

Did you buy them? What price would you have paid, if you had bought them?



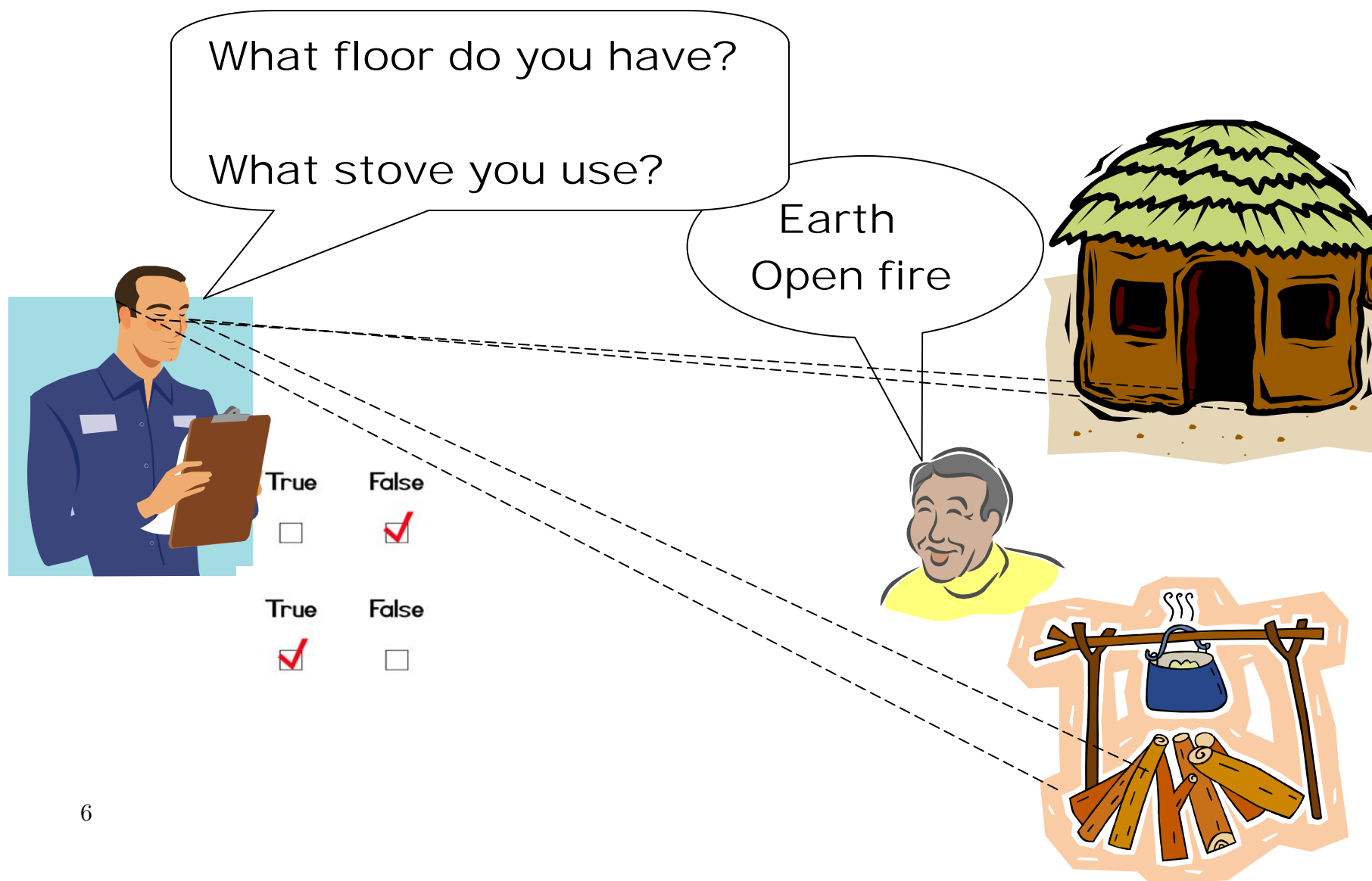
Yes. Ummm, 5, I think.

No. I don't know.



Poverty Scoring Costs Less

About 10-minute scorecard w/observable indicators



Simple Poverty Scorecard for Myanmar

Location		Entity	Additional data	
Survey No.:		Village:	Name of HH head:	
Township:		Field office:	WR Class:	
City/town:		Date scored:	Started w/UNDP:	
Ward/village tract:		Enumerator:	# HH members:	

Indicator	Response	Points	Score
1. How many members does the household have?	A. Eight or more	0	
	B. Seven	6	
	C. Six	10	
	D. Five	14	
	E. Four	19	
	F. Three	26	
	G. One or two	34	
2. What is the highest standard/diploma/degree that the female head/spouse has passed?	A. No female head/spouse	0	
	B. None, KG, or first standard	1	
	C. Second standard	7	
	D. Third to fifth standard	8	
	E. Sixth standard or higher	9	
3. How many rooms does the household occupy, including bedrooms, living rooms, and rooms used for household businesses (do not count toilets, kitchens, balconies, nor corridors)?	A. One or none	0	
	B. Two	2	
	C. Three	3	
	D. Four	4	
	E. Five or more	9	
4. What is the major construction material of the floor (observe, do not ask)?	A. Earth/sand, palm/bamboo, combination earth and wood/palm/bamboo, or other	0	
	B. Wood planks, parquet or polished wood, tongue-and-groove wood, cement, wood with covering, cement with covering, or a combination of cement/finished wood and something else	5	
5. What is the major construction material of the external (outer) walls (observe, do not ask)?	A. Thatch/large leaves/palm/ <i>dhani</i> , or tarpaulin	0	
	B. Bamboo, or rudimentary wood	2	
	C. Unbaked brick and mud, finished wood, or other	3	
	D. Baked brick and cement, or <i>pucca</i> cement	9	
6. What type of stove is used most often for cooking food in the household?	A. Open fire, open stove, rice-husk stove, or traditional closed stove	0	
	C. A1 improved stove, other improved stove, stove using electricity, gas, kerosene/diesel, or biofuel, or other	4	
7. Does any member of your household own or have access to a cupboard or a food-storage cabinet (including one rented to others or pawned)?	A. Neither	0	
	B. One, but not both	1	
	C. Both	5	
8. Does any member of your household own or have access to a black-and-white or colour TV (including one rented to others or pawned)?	A. No	0	
	B. Yes	9	
9. Does household member own or have access to a bicycle or non-motorized boat, a motorcycle, power tiller, trishaw, motorboat, trawlarjee, three-wheeled motor vehicle, motorcar (4 wheels or more), or tractor (including one rented to others or pawned)?	A. No, none of these	0	
	B. Only bicycle or non-motorized boat	4	
	C. Motorcycle, power tiller, trishaw, motorboat, trawlarjee, three-wheeled motor vehicle, motorcar (4 wheels or more), or tractor (regardless of bicycle or non-motorized boat)	8	
10. If any household member's main job is connected with agriculture, hunting, forestry, fishery, mining, or quarrying, and if any household member owns or has the right to use land for agriculture, forestry, pasture, livestock breeding, or water surfaces, then does the household own any non-draught oxen, non-draught buffalo, cows, mythun, horses, or donkeys/mules (including ones rented to others or pawned to others)?	A. Landless agricultural household	0	
	B. Non-agricultural household	1	
	C. Agricultural household with land, but no non-draught large animals	4	
	D. Agricultural household with land and with non-draught large animals	8	

Worksheet:

Household Roster and Main Job

At the start of the interview, read the following to the respondent:

Please tell me the names and ages of all the persons who usually sleep in the dwelling, eat most of their meals here, and share expenses together. You should include all members of the family, including any children or other persons who may be away for study or work but who consider this as their permanent residence. It also includes any other people who are not blood relatives but who normally sleep here, eat most of their meals here, and share expenses.

Write the names and ages of all household members. For each member 10-years-old or older, ask the respondent whether he/she in his/her main job is connected to agriculture, hunting, forestry, fishery, mining, or quarrying. Count the total number of household members, write it next to “# household members” on the right side of the header of the scorecard, and use it to mark the response to Question 1. You will use the responses related to the main job of each member later when marking Question 10.

Name of household member	Age	In his/her main job, is <name> connected to agriculture, hunting, forestry, fishery, mining, or quarrying?	
1.		No	Yes
2.		No	Yes
3.		No	Yes
4.		No	Yes
5.		No	Yes
6.		No	Yes
7.		No	Yes
8.		No	Yes
9.		No	Yes
10.		No	Yes
11.		No	Yes
12.		No	Yes
13.		No	Yes
14.		No	Yes
15.		No	Yes

How is a Scorecard Constructed?

- Data from Myanmar's 2009/10 IHLCA
- IHCLA features **lengthy expenditure** module
- Expenditure-based poverty status (poverty line of MMK1,031/person/day) known for HHs in IHCLA
- **Statistics** (regression) to select indicators and assign points to relate indicators to poverty status for surveyed HHs, **not just consultant's judgment**
- Total points (scores) range from 0 (most likely below poverty line) to 100 (least likely below line)
- Scorecard based on 2009/10 data is then **applied today** (and onward until 2014/15 IHLCA available)

What Do Poverty Scores Mean?

Score	Poverty Likelihood (%)
0–4	83.4
5–9	76.1
10–14	68.6
15–19	60.4
20–24	48.8
25–29	41.6
30–34	29.5
35–39	23.3
40–44	15.0
45–49	10.6
50–54	7.4
55–59	3.5
60–64	1.2
65–69	1.0
70–74	0.3
75–79	0.0
80–84	0.0
85–89	0.0
90–94	0.0
95–100	0.0

HHs in Myanmar who
score 19 have a
60.4% probability
(poverty likelihood)
of being below the
national poverty line

Source of poverty likelihoods?

Score	HH < line		HH in range		Pov. like. (%)
0–4	142	÷	170	=	83.4
5–9	732	÷	961	=	76.1
10–14	1,344	÷	1,958	=	68.6
15–19	2,466	÷	4,081	=	60.4
20–24	3,038	÷	6,226	=	48.8
25–29	3,922	÷	9,428	=	41.6
30–34	3,026	÷	10,276	=	29.5
35–39	2,804	÷	12,044	=	23.3
40–44	1,797	÷	11,946	=	15.0
45–49	1,234	÷	11,663	=	10.6
50–54	699	÷	9,427	=	7.4
55–59	278	÷	7,970	=	3.5
60–64	76	÷	6,094	=	1.2
65–69	39	÷	3,767	=	1.0
70–74	6	÷	2,249	=	0.3
75–79	0	÷	1,180	=	0.0
80–84	0	÷	357	=	0.0
85–89	0	÷	199	=	0.0
90–94	0	÷	4	=	0.0
95–100	0	÷	0	=	0.0

Score = 19 → poverty likelihood of 60.4%
because 2,466 of 4,081 HHs (60.4%) in IHLCA
survey who score 15–19 have consumption
below the national poverty line

Three Uses of Poverty Scoring

1. Estimate poverty rates today:
 - One summary number for reporting
 - Set goals and track progress
(all-UNDP, district, field office)
 - 'You manage what you measure'
2. Track changes in poverty over time:
 - How much change is due to UNDP?
(Plan for control group)
 - Scoring does not tell why poverty changed
3. Target/segment clients
 - Set goals for % poor among new participants
 - Allot budget by number of poor
 - Qualify individual HH for livelihood projects

1. Estimating Poverty Rates

A group's estimated poverty rate is the average of its members' poverty likelihoods.

Myanmar, sample of 3 clients, 01jan13

Client	Score	Poverty likelihood (%)
	1/1/13	
A	20	48.8
B	30	29.5
C	40	15.0
Average(=Poverty rate %):		31.1

2. Tracking Change in Poverty Rates

(Change is not the same as impact!)

Myanmar, 3 clients, 01jan13 and 31dec15

Client	<u>Score</u>		<u>Poverty likelihood (%)</u>	
	2013	2015	2013	2015
A	20	25	48.8	41.6
B	30	30	29.5	29.5
C	40	45	15.0	10.6
Average(=Poverty rate):			31.1	27.2

$(31.1 - 27.2) = 3.9$ -percentage point reduction in poverty rate (share of clients who are poor)

3. Targeting Accuracy

Cut-off	% of all HHs targeted	Pov. rate among targeted	% of poor HHs targeted
<=4	0.2	58.8	0.5
<=9	1.1	77.4	4.1
<=14	3.1	68.2	9.9
<=19	7.2	62.1	21.0
<=24	13.4	56.5	35.6
<=29	22.8	49.1	52.7
<=34	33.1	43.5	67.9
<=39	45.1	37.5	79.6
<=44	57.1	33.2	89.3
<=49	68.8	29.2	94.4
<=54	78.2	26.6	97.8
<=59	86.1	24.5	99.4
<=64	92.2	23.0	99.8
<=69	96.0	22.1	100.0
<=74	98.3	21.6	100.0
<=79	99.4	21.4	100.0
<=84	99.8	21.3	100.0
<=89	100.0	21.2	100.0
<=94	100.0	21.2	100.0
<=100	100.0	21.2	100.0

33.1% of all HHs score 34 or less.

43.5% of targeted HHs are < pov. line.

67.9% of poor HHs are targeted.

Example 5-Class System

	Cut-off	% of all HHs targeted	Pov. rate among targeted	% of poor HHs targeted
E	≤ 4	0.2	58.8	0.5
	≤ 9	1.1	77.4	4.1
	≤ 14	3.1	68.2	9.9
	≤ 19	7.2	62.1	21.0
D	≤ 24	13.4	56.5	35.6
	≤ 29	22.8	49.1	52.7
	≤ 34	33.1	43.5	67.9
C	≤ 39	45.1	37.5	79.6
	≤ 44	57.1	33.2	89.3
B	≤ 49	68.8	29.2	94.4
	≤ 54	78.2	26.6	97.8
A	≤ 59	86.1	24.5	99.4
	≤ 64	92.2	23.0	99.8
	≤ 69	96.0	22.1	100.0
	≤ 74	98.3	21.6	100.0
	≤ 79	99.4	21.4	100.0
	≤ 84	99.8	21.3	100.0
	≤ 89	100.0	21.2	100.0
	≤ 94	100.0	21.2	100.0
	≤ 100	100.0	21.2	100.0

Scorecard Feedback and Revisions

- 5 draft scorecards and feedback:
 - HDI managers rated candidate indicators
 - Piloted w/200 HH in Ayeyarwady, Kayin, Shan
 - About 10 interviews/day/enumerator
 - Matches WR targeting in 7 of 10 cases
 - Actions due to feedback:
 - Avoid indicators that vary by region
 - Replaced non-intuitive indicator
 - Replaced indicator that ignored land quality
 - Many minor adjustments
 - 'Guidelines' and training materials adjusted
- Final scorecard represents balance of goals/constraints across IHLCA, data, users

Data Quality Matters

- Scoring is useless unless data is high-quality
- All enumerators should follow same rules:
 - Across UNDP field offices
 - Across other NGOs/Govt. in Myanmar
- ‘Social auditor’ (like financial auditor) should interview random sample a second time and compare answers to original
- Quality will affect decisions that affect poor HHs:
 - Targeting of villages and households
 - UNDP’s reporting of results to funders
 - UNDP’s management for improving impacts

'Guidelines to Interpretation'

Rule: Follow IHLCA practice when applying scoring

- Wording of indicators/responses follow IHLCA
- Interpretation of indicators/responses follow IHLCA
- 'Guidelines' are based on IHLCA *Enumerator Manual* and on how IHLCA enumerators were trained
- When in doubt, check 'Guidelines'
- If 'Guidelines' do not give an answer, then (perhaps together with the respondent) use your own best judgment. UNDP field offices or higher levels should not establish rules that were not followed in IHLCA

Before Starting Interview

- **Study** 'Guidelines', and carry a copy with you.
This training does not cover everything
- **Plan** day's route (make a map)
- **Ask** for HH head or any adult who can respond
- **Introduce** yourself according to local custom
- **Tell** reason for survey: 'UNDP wants to learn more about how households like yours live'
- **Say** who is covered: 'Many households in this village and other villages are being interviewed'
- **Assure** confidentiality: 'UNDP will use all surveys to improve its decisions, but no one will know which answers are yours'

Before Starting Interview

- Do not offer any incentive for participation
- Avoid having non-household members present
- Ask permission to start
- Maintain a neutral expression. Do not seem to judge responses by facial expression, laughs, etc.
- Read questions word-for-word in order given. If needed, re-read. If still not understood, interpret for respondent in your own words
- Translate to respondent's language, if needed
- Do not let respondent keep any questionnaires
- Do not prompt ('You are a farmer, right?')

Fill Up Header Data

- **Record** township, city/town, ward/village tract, village, field office, enumerator (if data is known, you can fill this before meeting household)
- **Write** name of household head
- **Leave** 'Survey No.' blank (for data-entry operator)
- **Record** household's WR class
- **Ask** for year when household first participated in UNDP programs
- **Note** date of interview
- **Record** total number of household members (after completing back-page worksheet)

Complete Back-Page Worksheet

- Turn scorecard over to the back page
- Read definition of household member word-for-word to respondent
- List names and ages of all household members
- Clarify whether unusual cases are HH members
- Ask and mark, for each member 10-years-old or older, whether his/her main job (job worked most time) is connected with agriculture, hunting, forestry, mining, or quarrying
- Add up the number of household members, then:
 - Write it in “# household members” in header
 - Circle response for Q1

Who Is a Household Member?

Be extra careful: HH size is best poverty predictor

- General rule: Household members are those who:
 - Usually sleep under the same roof
 - Usually share meals
 - Share household expenses
- Notes:
 - HH members do not need to be blood relatives
 - No one can be a member of 2 households
 - Infants and children are HH members, even though they do not contribute economically
 - Dead people are not HH members

Who Is a HH Member? (Special Cases)

- Students living elsewhere are members, if they:
 - Are supported by HH, and
 - Are not members of other HHs
- Migrants are members, if they:
 - Consider themselves to be members, and
 - Contribute economically to HH
- Monks are members, if they have a definite date when they plan to return home (even if HH does not support them). Permanent monks are not HH members.
- Military who live apart from HH are not members (even if they contribute economically)
- New additions (such as new spouses) are members, if they arrived before the interview and plan to stay permanently. Recently departed people or temporary visitors are not members.

Q2: Education of Female Head/Spouse

- Who is the household head?
 - Whoever earns the most income, or
 - Whoever the household recognizes as head
- Who is the female head/spouse?
 - HH head, if the head is a woman
 - Spouse/partner/companion of HH head, if head is a man
 - If neither of the previous two criteria are not met, then there is no female head/spouse

Q3: Number of Rooms

- You can **ask or observe** this without asking
- **Do not count** toilets, kitchens, bathrooms, balconies
- **Count** rooms used for HH businesses, such as storage rooms, whether part of main dwelling or part of separate building
- If 2 HHs share a dwelling, then assign each room to the one HH that uses it most
- **Rooms** are areas **defined by partitions** (walls, curtains, cupboards, or other dividers) with distinct purposes (such as living room/bedroom, or children's bedroom/parents' bedroom).

Q4: Main Floor Material

- **Observe** main floor material (do not ask)
- If more than one material, **record main one**
- If main floor material is not listed, **mark 'other'**

Q5: Main Exterior Wall Material

- **Observe** main exterior wall material (do not ask)
- If more than one material, **record main one**
- If main wall material is not listed, **mark 'other'**

Q6: Type of Stove

- Record **most-often used** type
- If main type is not listed, mark 'other'
- Definitions:
 - Open fire: Pot set on 3 bricks above fire on ground outdoors (not in kitchen)
 - Open stove: Like open fire, but in kitchen
 - Rice-husk stove: Designed to burn rice husks
 - Traditional closed stove: Cement or pressed earth w/hole on top for pot & on side for fuel
 - A1 improved stoves/other improved stoves: Efficient closed stoves that use less fuel than previous 4 stoves listed above

Q7: Cupboard and food-storage cabinet

Mark:

- 'A. Neither' if HH does not own nor possess cupboard nor food-storage cabinet
- 'B. One, but not both', if owns or possesses:
 - Only cupboard
 - Only food-storage cabinet
- 'C. Both', if HH owns or possesses:
 - Both cupboard and food-storage cabinet
 - Only cupboard, but also uses it as food-storage cabinet

Rules for Assets in Q7, Q8, Q9

- Count only working/functioning assets

What is meaning of 'own or have access to'
and 'ones rented or pawned to others'?

It means 'owns or has on homestead'. Count asset if HH:

- Owns it and has it on homestead
- Owns it but has rented, loaned, or pawned it out
- Rents or borrows it and has it on homestead
- Has it on homestead, even if it still owes money on it

Count asset if owned (even if not on homestead), or
if asset is on homestead (even if not owned).

Do not count if not owned and not on homestead (such
as a neighbor's cell phone that HH sometimes uses)

Q8: Television

Apply rules just discussed:

- Count only working/functioning TVs
- Count TVs if owned (even if not on homestead), or if TV is on homestead (even if not owned)
- Do not count TVs not owned or not on the homestead (such as TVs in tea shops or in neighbor's houses)

Q9: Transport Assets

- Apply 'owns or has on homestead' as for Q7, Q8
- Mark according to 'best' transport asset:
 - A, If no assets listed qualify
 - B, If only bicycle or non-motorized boat qualify
 - C, If any assets in C qualify, regardless of whether HH owns or has bicycle or row boat
- All assets in (C) are better than all assets in (B)

Q10, Part 1: Agricultural Job

Ask Q10 in 3 parts (not as worded on scorecard):

1. 'Is any household member's main job connected with agriculture, hunting, forestry, fishery, mining, or quarrying?'
 - Do not ask this question; mark based on Notes from back-page worksheet
 - Agriculture is short for 'agriculture, hunting, forestry, fishery, mining, or quarrying'

If no one's main job is in agriculture, mark 'B. Non-agricultural household', and go to end of interview, skipping parts 2 and 3 of Q10

Q10, Part 2: Agricultural Land

Ask part 2 of Q10: 'Does any HH member own or have the right to use land for agriculture, forestry, pasture, livestock breeding, or water surfaces?'

- **Agricultural land** is 'land for agriculture, forestry, pasture, livestock breeding, or water surfaces'
- 'Right to use' means HH can **exclude others from use** because it owns it (even if rented, sharecropped, or pawned out) or if it rents, sharecrops, or borrows it in, or if it has govt. permit
- If HH has no agricultural land, mark 'A. Landless agricultural household', and go to end of interview, skipping part 3 of Q10

Q10, Part 3: Large farm animals

Ask part 3 of Q10: 'Does HH own any non-draught oxen, non-draught buffalo, cows, mythun, horses, or donkeys/mules?'

- **Draught** oxen and buffalos' main purpose is to do work such as pulling plows or carts. Baby animals raised to work count as draught. Do not count draught oxen nor draught buffalo
- Count all mythun, horses, and donkeys/mules regardless of draught status.
- Do not count sheep, pigs, goats, poultry, or other animals not listed in Q10
- **If HH does not own large, non-draught animals, mark 'C.** Ag. HH w/land, but no large farm animals'
- **If HH owns large, non-draught animals, mark 'D.** Ag. HH w/land and w/large farm animals'

At End of Interview

- **Circle** each response option and its points, and write the points in right-hand column
- **Check** that each question has one (and only one) response. If not, score cannot be computed
- **Add up** points to get score, and write score down
- **Make sure** all header information is complete
- **Correct** if needed before leaving
- **Do not give** respondent a copy of questionnaire
- **Thank** respondent, and say good-bye
- **Submit** scorecard to field-office data-entry person
- **Key** header and responses using Excel tool
- **Maintain** database and paper lists of scores

How to Deal with Exceptions?

What happens if HH is D or E by WR but A, B or C by scoring? (or vice versa)

- Not an issue in new project areas or if not targeting
- In project areas, ask 'Did HH become less poor?'
- How to permit exceptions, without allowing abuse?
 - Adapt current WR system for exceptions to review/request exceptions for scoring
 - Qualify all current D and E regardless of score?
- What does enumerator see that scoring misses?
 - Disabled
 - Small, elderly HHs with low income
 - Large HHs with many earners and high income

How to Fit Scoring w/Current Processes

- CDFs are enumerators
- Admin. assistants keep CDFs supplied with paper scorecards, key data, back up data, maintain lists of HHs scored and targeted, send data to Yangon
- Adapt existing WR processes for handling exceptions and for tracking:
 - Who has been scored/need to be scored
 - Targeting status of HHs
- UNDP/Yangon analyzes data, sets goals, measures progress, reports results, relates poverty data with other data

Sampling and Roll-out Approaches

- Sampling approaches:
 - To estimate poverty rates, take random sample in current or potential project villages
 - To target specific HHs, census all HHs
- Approaches to roll-out:
 - **Big push**: Scoring HHs is main activity of CDFs and field offices for several weeks/months
 - **Combine trips**: For a few months, CDFs score HHs who they happen to meet as part of regular project work. Then do 'small push' for a few weeks to score remaining HHs

Use Scoring Data to Manage

- **To target**, score HHs in 2012/13 (or when evaluating potential new project villages)
 - Could use WR to target HH, and scoring to target villages and measure change/impact. Depends on:
 - Costs
 - Whether scoring targets accurately enough
 - Or use scoring for all purposes
- **To measure change**, score again at project end (2015)
- **To measure UNDP's impact**, compare change between project villages and controls (best controls are villages that UNDP almost picked but did not)

Guidelines for Training Field Staff

- Briefly describe scorecard based on IHLCA data and adjusted with review and pilot test (10 min.)
- Focus on reviewing scorecard (especially 'Guidelines to Interpretation') (90 min.)
- As you review, give test questions to check understanding of 'Guidelines' (30 min.)
- CDFs role-play applying scorecard to each other, pretending they are villagers (20 min.)
- Accompany CDFs first day or two in villages
- Train for data-entry operators using documentation for Excel tool

FOR MEASURING POVERTY AND
TARGETING THE POOR,
POVERTY SCORING IS
SIMPLE,
INEXPENSIVE,
ACCURATE,
OBJECTIVE,
and
TRANSPARENT.