



10 July 2012

To: Ofelia Eugenio, UNDP/Myanmar

From: Mark Schreiner

Re: Results/notes on ratings of candidate poverty indicators for poverty

This note documents results of a desk review of candidate indicators for the poverty scorecard. It also contains my responses to reviewers' specific comments. It presents the final list of indicators (subject to the pilot test) and discusses why they were selected.

The next page shows average ratings for each candidate indicator by four criteria:

- Strength of link with poverty
- Ease of collection
- Union-wide applicability
- User acceptability

Ratings run from 1 (worst) to 5 (best). The figure also shows the number of times an indicator was picked as one in the "top 10", and also the average rating across the four criteria. There is a strong, positive correlation between the average rating and the number of times an indicator is selected into the "top 10".

The indicators in light green are those selected for the scorecard. There is a positive correlation between these selections and raters' ratings. There are also a couple of cases where a low-ranking indicator is selected. These choices are discussed below.

Broadly, I tried to follow the raters' rankings while also including a wide variety of indicators (demographics, employment, education, assets, and agriculture). In some cases, including one preferred indicator (such as "Number of rooms") meant not including another, related indicator (such as "Type of dwelling") because the two indicators capture more or less the same thing. This also occurs, for example, with "Type of exterior wall" and "Type of floor".

I also tried to choose indicators related to women. This partly explains the inclusion of "Type of stove", which most raters do not believe was linked strongly with poverty. It also explains why the education indicator refers to the female head/spouse.

Candidate indicators for poverty scoring, ordered by average rating across criteria

Indicator (condensed wording)	Link with poverty?	Ease of collection?	Applicability all regions?	Acceptability by users?	Times in top 10?	Average rating
Total household size?	4.3	5.0	4.6	4.8	8	4.7
Owns bicycle, boat, motorcycle, or car?	4.6	4.8	4.5	4.8	7	4.7
Owns TV?	4.6	4.9	4.4	4.5	8	4.6
Number of rooms in residence?	4.6	4.8	4.2	4.7	6	4.6
Owns cupboard?	4.3	4.7	4.4	4.8	6	4.6
Owns wooden food-storage cabinet?	4.2	4.7	4.2	4.8	6	4.5
Type of dwelling?	4.9	4.4	3.6	4.6	7	4.4
Type of external walls?	4.4	4.7	3.7	4.4	5	4.3
What is the type of floor?	4.0	4.4	3.8	4.5	6	4.2
Education of female head/spouse?	3.5	4.6	4.1	4.3	4	4.1
Owns clock?	3.2	4.8	3.7	4.4	3	4.0
Workers in agriculture or elementary occupations?	4.5	3.6	3.9	3.8	6	3.9
Acres of <i>le</i> (paddy) land?	3.9	3.2	3.6	3.8	2	3.6
Trade or business of male head/spouse?	3.7	3.6	3.7	3.4	1	3.6
Type of stove?	2.7	4.4	3.3	3.9	0	3.6
Acres of agricultural land?	4.4	2.9	3.4	3.8	4	3.6
Owns electric iron?	2.9	3.8	3.5	3.8	0	3.5

Of course, I also tried to listen to the data in terms of picking indicators with strong links to poverty. This is why “Wooden food-storage cupboard” beats “Cupboard” and why “Type of floor” beats “Type of (exterior) walls”.

Finally, the scorecard must have ten indicators, and the ten must come from the 17 candidates here. There are not any other indicators that, when combined with nine others from this list, give reasonable results (that is, points increase in a common-sense way across response options, are non-zero, and are not too extreme). This virtually requires the selection of an indicator for employment and one for agriculture; otherwise, the scorecard would probably have to have two more questions about the ownership of “small” assets, and each of the them might carry only a point or two.

For employment, “number of household members working in agriculture or in elementary occupations” ranks higher than “sector of work of the male head/spouse” and has a more rural focus. I also believe it is legitimate, given that the IHLCA was fielded twice to capture seasonality, to have this question pertain to “the past year”, rather than to “the last seven days”.

For agriculture, “acres of agricultural land” beats “acres of *le* (paddy) land’ because it is more universally applicable. I have also greatly simplified this indicator, which should allay much of the raters’ concerns.

Most issues brought up in the raters’ comments are addressed (or at least acknowledged) below. (In most cases, I have slightly reworded/combined comments for clarity and to reduce repetition.) I try to explain why something is the way it is (when I cannot change it), why I am not changing it (if I am choosing not to change it), or how I have changes things in response to the comments. In many cases, I am constrained by the IHLCA. In others, I have knowledge of the IHLCA data that the raters lack. In a few cases, I made (and have now corrected) mistakes in transcribing indicators. Finally, in some cases I simply appeal to my own expertise based on the gestalt of how certain indicators seem to work around the world.

I would like to thank the following raters who diligently—and on short notice—rated the indicators and offered their valued comments:

- Saw Win Aung
- Ma Myo Aye
- Ofelia Eugenio
- Jitendra
- Khin Kyaw
- Nilar Swe
- Saw Doh Wah

Specific textual comments from raters and my responses

In the discussion below, I generally list comments that describe weaknesses or how to improve an indicator, omitting those that are positive about an indicator's usefulness.

1. How many members does the household have?

- A. Eight or more
- B. Seven
- C. Six
- D. Five
- E. Four
- F. Three
- G. One or two

- *I would prefer to use “How many economically inactive members does the household have?” and the to provide a definition of economically inactive. This indicator is linked more strongly with poverty than household size*

It is difficult to define “economically inactive” in a way that would be feasible to collect with single question. I did test several indicators for Myanmar related to the number of household members who reported working, but it is not strongly predictive of poverty, especially after accounting for other indicators in the scorecard.

I have tested a “dependency ratio” of total members to economically active members in several countries, and it is not not only prohibitively complex (count all household members; count all economically active members; take the ratio) but it is also less powerfully predictive.

- *Rather than total members, the link with poverty would be stronger if we asked for the number of economically active members. Some big household are not poor, because there have working age family members*

See the response above. While some big households are less likely to be poor because they have more working-age members, the typical big household is more likely to be poor. Scoring picks up averages, and it can miss exceptional cases.

- *Household must be defined because in households are often composed of many families*

The “Guide to the Interpretation of Indicators” reproduces several passages from the IHLCA *Enumerator Manual* that define *household*, including a definition that the interviewer reads to the respondent at the start of the interview.

2. In the last seven days, what kind of trade or business was the main job of the male head/spouse connected to?
 - A. Does not work, or other community, social, and personal services
 - B. No male head/spouse
 - C. Agriculture, hunting, forestry, fishing, mining and quarrying, manufacturing, electricity, gas, and water supply, or construction
 - D. Others

- *The answer can vary by season. Why only seven days? What if a person was earning a lot before seven days but is idle for the last seven days for some reason?*

The original question in the IHLCA specifies “in the last seven days”. It likely does this to provide a concrete, recent reference point for which the respondent can answer based on fresh, specific memories.

The poverty scorecard is unconcerned with earnings; it measures poverty based on consumption, which is less variable day-to-day and week-to-week than earnings.

Still, there definitely is an issue with seasonal variation in responses, especially for agricultural households. The IHLCA had two rounds precisely to account for seasonality. Nevertheless, it is not workable to ask only about the last seven days. Yet the scorecard needs an employment indicator, preferably one related with agriculture. I have thus changed “In the last seven days” to “in the last year. This seems true to the original IHLCA, and it does not depend on season when the interview is done.

- *Who is the household head? In Myanmar, the eldest person may be named as the head even though he/she does not work.*

The “Guideline to the Interpretation of Indicators” defines *household head* based on the IHLCA’s *Enumerator Manual*.

- *The main job of the male head/spouse cannot cover the female head*

This is correct. This question asks only about the male head/spouse. I tested an indicator for the sector of work of the female head/spouse, but it was not as powerfully predictive. Furthermore, the sectors of spouses tend to be highly correlated, so once one is included in a scorecard, adding the other contributes little.

- *To avoid confusion, male head/spouse needs to be defined*

For the purposes of the poverty scorecard, the “Guidelines to the Interpretation of Indicators” defines the *male head/spouse* as:

- The household head, if the head is a man
- The spouse/partner/companion of the household head, if the head is a woman
- Non existent, if neither of the previous two criteria are met

The term *male head/spouse* is used to avoid making assumptions about whether a male or female is (or should be) the household head.

3. In the last seven days, how many household members worked in their main occupation as skilled agricultural and fishery workers or in elementary occupations?
- A. Four or more
 - B. Three
 - C. Two
 - D. One
 - E. None

- *The general validity of the information depends on the season . . . it should be at least one month. It may not account for seasonal migration*

Agreed. See discussion above. I have changed this to “In the last year, how many household members in their main occupation were skilled agricultural and fishery workers or in elementary occupations?”

- *Both the household head and other household members need to be considered. To a certain extent, more money can be earned if more family members work*

This is true, and this indicator does consider both the household head and other household members. While it is true in general that more earners means more income (all else constant), this question asks about two specific, low-earning types of occupations (agriculture and day labour, also called, for some unknown reason, “casual labour”). In Myanmar—as in every other country in which I have tested a similar indicator—more workers in agriculture and/or more day labourers signals greater poverty. While these households have higher earnings than if they had fewer agricultural or day labourers, the fact they do have some means that they are agricultural (and thus more likely to be poor). Also having more of these types of workers is linked with both a larger household size (and thus greater poverty risk) and with a greater need for earnings and so a greater willingness to take on difficult, low-paying work in agriculture and day labour. In other words, having a high number of workers in these sectors may be more of an effect of poverty, rather than a cause. Either way, the presence of these workers is a signal of greater poverty risk.

- *We must define elementary occupation*

The “Guidelines to the Interpretation of Indicators” will define this, based on the IHLCA *Enumerator Manual*.

4. What is the highest standard/diploma/degree that the female head/spouse has passed?
- A. No female head/spouse
 - B. None, KG, or first standard
 - C. Second standard or higher
 - D. Third to fifth standard
 - E. Sixth standard or higher

- *Why female head/spouse? Why not the male head/spouse, or the education of the household head, be it male or female?*

The education of the female head/spouse, in a scorecard context, is, in almost in every country (including Myanmar), more predictive of poverty than the education of the male head/spouse. Also, I try to give preference to women-related indicators, as a form of affirmative action.

The odd term *female head/spouse* is used to avoid assuming who is the household head. It does not imply that the head of the household is (or should be) female. (Likewise, *male head/spouse* does not imply that the head is a male.) For the scorecard, the “Guidelines to the Interpretation of Indicators” defines *female head/spouse* as:

- The household head, if the head is a woman
- The spouse/partner/companion of the household head, if the head is a man
- Non existent, if neither of the previous two criteria are met

The “Guidelines to the Interpretation of Indicators” defines *head of household* based on the *IHLCA Enumerator Guide*.

- *What if the head of household is male? What if there is no female head/spouse because the male head/spouse is a widower?*

If the head is male, then the female head/spouse is the spouse/partner/companion of the head. If there is no such female in the household (as in the case of a widower), then the response is “No female head/spouse”.

- *It would be preferred to ask about the education of the household head, and not just the female head/spouse*

See response above. It is simpler and more powerful to ask about the education of the female head/spouse.

- *In rural areas, there may be a tradition of providing less support for women and girls to go to school*

Yes. The presence/absence of this tradition may be linked with poverty risk, which is one reason why this makes a good indicator. Less-educated women are more likely to be the female head/spouse in a poor household than are more-educated women.

- *If the family is headed by educated person—regardless of whether the head is a man or woman—normally they are less likely to be poor*

True, and this indicator reflects that. Higher points go to households where the female head/spouse has more education. And more-educated men tend to be married to more-educated women.

- *I would suggest modifying the response options to make it more acceptable to users:*
 - A. No female head/spouse*
 - B. None or Reading/Writing/Arithmetic (Ah Thone Lone)*
 - C. Between KG to fourth standard (primary school education)*
 - D. Between passed fourth standard and eighth standard (middle school education)*
 - E. Between passed eighth standard and tenth standard (high school education)*
 - F. Passed tenth standard and higher*

This logic makes perfect sense. I do not use it for three reasons. First, The IHLCA collects data only on the highest standard passed (up to tenth) and then about degrees. It does not ask about *ah thone lone*. I can only ask questions and use response options in the IHLCA. Second, few female head/spouses in the IHLCA data have education above fifth standard, so it is not statistically feasible to make fine distinctions above that. There just is not enough data points. Third, at first I did divide the response options at the logical points corresponding to the end of different stages of schooling. But the data suggested different breaks, perhaps because the schooling system has changed over time. In sum, the IHLCA questionnaire format and its data support the response options as they appear.

- *This may be an embarrassing question*

Good point. The training process will address this, instructing interviewers not to comment or reveal by tone-of-voice, body language, or facial gestures that any answer is more or less desirable than another.

5. How many rooms does the household occupy, including bedrooms, living rooms, and rooms used for household business (do not count toilets, kitchens, balconies, and corridors)?
- A. One or none
 - B. Two
 - C. Three
 - D. Four
 - E. Five or more
- *Should we count rooms in a separate building in same compound that it is used for business (for example, a storage building)?*

No, count only rooms that the household occupies.

- *Rural houses of ethnic minorities often do not have several rooms, even when the rooms are small. Rather, they have only two to three rooms, for example, a living room, a bed room, and a kitchen*

This is fine. These groups are probably also more likely to be poor. Instead of detecting this by asking about their ethnicity, the scorecard detects it by the number of rooms in their homes. Almost people, regardless of ethnicity, prefer bigger houses (up to a point), so it is likely that economic resources (poverty) is the main driving of the number of rooms in a household's dwelling.

6. What is the type of dwelling (observe, do not ask)?
- A. No dwelling, or hut with 1-year post-life
 - B. Hut with 2- to 3-year post life
 - C. Wooden house
 - D. Semi-pacca or brick house, or condominium/apartment/flat

- *How to judge the number of years of post-life?*

Good question. If this indicator is in the scorecard, I will ask the IHLCA Technical Committee how enumerators were trained. It may be that the Myanmar term for *post-life* is clear and that it is only the English translation that is unclear.

A weakness of this indicator is its reliance on enumerator judgment. For example, what qualifies as a *hut*?

- *In Shan state, most of the house are built with local brick even if the household are poor. Likewise, houses in hilly regions are built with lime block regardless of whether the household is poor, simply because lime block are locally available and such construction is necessary in a cold region*

This is a good point. Among the various indicators of housing quality considered here (type of dwelling, type of floor, type of wall), the type of dwelling may be less universally applicable.

- *Floor and wall more verifiable than “type of dwelling”*

Good point.

7. What is the major construction material of the floor (observe, do not ask)?
- A. Palm/bamboo, or combination earth and wood/palm/bamboo
 - B. Earth/sand, or other
 - C. Wood planks

In the ratings spreadsheet, I mistakenly put the wrong response options (as several raters pointed out). The correct ones are:

- A. Palm/bamboo, combination earth and wood/palm/bamboo, or other
 - B. Earth/sand
 - C. Wood planks, parquet or polished wood, tongue and groove wood, cement, wood with covering, cement with covering, combination cement/finished wood and other
- *It would be better to use roof and wall rather than floor*

For identifying the poor, the type of floor has three advantages over roof or wall. First, it has a higher share of households in the “most likely poor” response option (“Palm/bamboo, combination earth and wood/palm/bamboo”). Second, it has a more even distribution across response options. Third, floors seem less variable regionally.

- *Option A and B should reverse for rural houses*

The data suggest the present ordering. In any case, there is only one point of difference between them, so they are almost the same response option. Reversing them or grouping them both together would make little difference.

- *It would be better to reflect expenditure better to consider the type of roofing sheets*

The data do not support this.

- *Response options should be:*
 - A. *Earth/sand or similar material*
 - B. *Palm/bamboo, in combination with earth*
 - C. *Bamboo or similar material*
 - D. *Wooden planks or higher*

In general, the data—in the context of the scorecard and its other indicators—supports the existing grouping and ordering of response options. The option “or similar material” is not used in the IHLCA, and the scorecard can use only response options present there.

8. What is the major construction material of the external walls (observe, do not ask)?
- A. Thatch/large leaves/palm/*dhani*, or tarpaulin
 - B. Bamboo, or rudimentary wood
 - C. Unbaked brick and mud, finished wood, or other
 - D. Baked brick and cement, or pucca cement

- *Wall materials can vary by region based on the availability of the materials regardless of wealth status, e.g. in Shan even the poor have brick walls*

Probably materials are available almost everywhere, but at a higher cost of purchase and transport. So this regional sensitivity makes sense. At the same time, regions with higher material costs may also be more remote areas that tend to be poorer in general. Thus, the type of wall may still be a good indicator because it serves as a proxy for the general economic level of the area. But this argument of mine does not work in Shan.

- *Bamboo and wood should be distinct response options, not grouped together*

The data suggest grouping them, as they have similar same point values. If ungrouped, they would have the same points, so it would be make no difference.

9. What type of stove is used most often for cooking food in the household?
- A. Open stove, rice-husk stove
 - B. Open fire, or traditional closed stove
 - C. A1 improved stove, other improve stove, other, or no stove

This is one of my favorite indicators, in Myanmar and elsewhere. But—along with ownership of an electric iron—it was one of the least favored by the raters. I like it because it is female-focused, it matters for health, it is “small” and so might change with small changes in poverty, and is a good predictor of poverty risk.

- *Types of stove could vary from one region to another based on the availability of the materials and awareness regardless of the wealth status*

Yes, the type of stove used has a regional/cultural aspect. But poverty is linked with regions, and this indicator helps to pick that up. The data show that—on average—the type of stove is predictive of poverty risk, controlling for other scorecard indicators.

- *The indicator is weakly linked to poverty because even better-off rural families still use an open stove because the firewoods the only source of energy. Even better-off households may use open stoves because they can afford to buy firewood*

This makes sense, but on average the data suggest that the type of stove is linked with poverty, even if for some households in some areas, the type of stove depend on local conditions, not on the household’s level of poverty. Even if the stove does reflect only local conditions, it is fine for an indicator not to be a cause of poverty (or caused by poverty) but rather a proxy for another cause or effect.

- *Please define open fire and traditional closed stove. What is meant by no stove?*

“No stove” is a mistake of mine. About 600 households have “not applicable” as their response to this question in the IHLCA data, and I incorrectly interpreted this to mean “does not cook” or “does not have a stove”. After checking, I see that it means that the question was skipped because, in the previous question, the household said that its main cooking fuel was electricity, gas, kerosene/diesel, or biofuel. I have fixed this.

According to Mr. Nyan Lin, IHLCA enumerators were told in their training that *open fire* means cooking with a pot set on three bricks above a fire on the ground outdoors (not in a kitchen). In contrast, *open stove* means cooking with a pot set on three bricks above a fire indoors in a kitchen. A *rice-husk stove* is designed specifically for burning rice husks. A *traditional closed stove* has a permanent structure (made of, for example, pressed earth, adobe, or cement) with a hole on top on which the pot sits and a hole on one side through which fuel is added to the fire under the pot and from which ashes are removed. *A1 improved stoves* and *other improved stoves* are closed stoves that are efficient enough to require only a single piece of firewood.

Given this, I have revised the indicator to combine the first two response options.

- *Using a fuel-efficient stove is good for a variety of environmental and development reasons and is something to consider when planning projects, but it may not be a good indicator of poverty*

Based on the data, it is a good poverty measure. Its power is similar to some other measures, but I prefer this indicator because of its gendered aspects.

10. Does any member of your household own or have access to a cupboard (including one rented to others or pawned)?

- A. No
- B. Yes

- *It may not be applicable to put “rented or pawned”. Likewise, just “own” should be specified, omitting “have access to”, as ownership is enough. “Having access to” is a grey area in Myanmar*

The IHLCA questionnaire uses this wording, so the scorecard uses it. The intent of “rented or pawned” is to count assets that the household has rented out or pawned out. These assets are still owned, although the household does not currently have possess them. Of course, I suspect that few—if any—households rent or pawn cupboards.

Likewise, “has access to” refers to assets that the household has in its possession but does not own (such as a rented motorcycle.

This issue is the same for all the asset questions below, so I have conferred with the IHLCA Technical Committee about the correct interpretation, and the “Guide to the Interpretation of Indicators” reflects this. In summary:

- Assets that the household has rented out or pawned out are to be counted, because the household owns them, even though they are not currently in its possession
- Assets that the household currently has in its possession (“has access to”) are also to be counted, even if the household does not own them but merely rents them in or has borrowed them
- For the purposes of this question, “has access to” does not count assets that the household can use, but does not own or possess. For example, the question would not count a television that the household can watch at a neighbor’s house, nor a landline telephone that the household can pay to make a call

In sum: count the asset if the household owns it (even if it is not currently in its possession), and also count the asset if the household currently has it in its possession (even if it is not owned). That is, count the asset if it is owned or possessed.

11. Does any member of your household own or have access to a wooden food-storage cabinet (including one rented to others or pawned)?
- A. No
 - B. Yes

See response for “cupboard” above.

- *Almost all rural houses do not a wooden food-storage cabinet, regardless of poverty*

In the IHLCA data, about half of households in Myanmar own or possess a wooden food-storage cabinet.

12. Does any member of your household own or have access to a clock (including one rented to others or pawned)?
- A. No
 - B. Yes

See response for “cupboard” above.

- *Clocks nowadays are so cheap that anyone can afford this; hence, they are no longer good poverty indicators*

This is a good point. If the relationship between clock ownership and poverty has changed since the IHLCA survey in 2009/10, then this indicator should not be used.

- *A clock is not a good indicator because it is relevant only for household with a need to something on time*

Yes, and this is exactly why it is a candidate indicator. For example, agricultural households—who on average are more likely to be poor—have little need to tell time. All they need to know is that it is morning, or evening, or planting season, or harvest. Households who need to tell time on a finer scale tend to be less poor. For example, such households may have a salaried member who must get to his/her job on time.

- *Maybe replace “clock” with “table clock/wall clock”, without counting wrist watches, which are now very inexpensive*

I would be happy to tailor the indicator in this way, but the IHLCA asks only about the ownership of a “clock”, without distinguishing between table, wall, and wrist clocks.

13. Does any member of your household own or have access to an electric iron (including one rented to others or pawned)?
- A. No
 - B. Yes

See response for “cupboard” above.

For the raters, this was the most reviled of all candidates.

- *Most rural areas lack electricity, so even rich households do not have an iron*

Yes, but rural areas are also poorer because they are rural, and access to electricity is a good proxy for this.

- *This may be difficult to observe and verify, as the iron might out-of-sight somewhere*

True. Still, the principle is that the answers should be verifiable, not that they always actually are verified. The idea is that households are less likely to misrepresent verifiable answers, even if their actual answers are not always verified.

14. 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
 - B. Yes

See response for “cupboard” above.

- *Black-and-white TVs are rare, so it should simply be TV*

In the IHLCA, about 10 percent of households in Myanmar own black-and-white TVs.

- *Some rich households do not put a high value on television and watching TV*

This is true. Nevertheless, on average, owning a TV is, in the data, a signal that the household is less likely to have consumption below a poverty line. Scorecards work on average, and are always exceptions to the general pattern that the scorecard will miss.

15. Does any member of your household own or have access to a bicycle, boat, motorcycle, or motorcar (4 wheels) (including one rented to others or pawned)?
- A. No, none of these
 - B. Only bicycle or boat
 - C. Motorcycle or car (regardless of boat and bicycle)

See response for “cupboard” above.

- *“Motorcycle/car” should be “Motorcycle/boat with engine/bullet cart/trailer jeep/power generator”. “Row boat” and “Motorized boat” should be separate options.*

I see the reasoning, but the IHLCA asked questions do not allow this. For example, only agricultural households were asked about carts and motorized boats.

- *Poor people are less likely to own these assets, but not all rich people own them, as some rich people are not interested in them*

True, but the scorecard works on averages and by general patterns. Some people can afford a motorcycle or car but yet do not own one. Still, people who own a motorcycle or car are less likely to be poor than most people who do not own them.

- *Motorcycle and car should be different categories*

Yes, poverty likelihoods differ greatly across owners of these two assets, and my first tests kept them as separate categories. But only about 2 percent of households in Myanmar own a car, and less than 2 percent of car-owning households are poor. This means that the point value for owning a car is very high (about 25 points), leaving only 75 points for the rest of the indicators. This decreases the scorecard’s overall power. So I combined the two categories, freeing up more points for the other indicators. This decreases power for the 2 percent who own cars, but those households are going to have the “less poor” response on almost all the other indicators anyway, and so they are not difficult to identify even with motorcycle and car combined.

- *It would be good to include some transportation means used in villages such as the bullock cart and trawlargee*

I agree, those questions were asked only to agricultural households. Covering them would require a very complicated question and answers. First, the question would have to determine whether the household was agricultural, and second, the responses would have to be divided up between agricultural versus non-agricultural households.

16. What is the total area (in acres) of all plots of land (agricultural, forest, pasture, for livestock breeding, or water surfaces) that any member of the household has the right to use?
- A. Non-agric. HH
 - B. Landless agric. HH
 - C. 0.1 to 1.9
 - D. 2.0 to 2.9
 - E. 3.0 to 4.4
 - F. 4.5 to 7.9
 - G. 8.0 or more

- *It would be better to simplify the question to “how many acres of land are owned”*

I agree. After a little tinkering, I combined “Non-agricultural household”, “Landless agricultural household”, and “0.1 to 1.9 acres” into a single category. This then allows the question to be presented as:

“What is the total area (in acres) of all plots of land (agricultural, forest, pasture, for livestock breeding, or water surfaces) that any member of the household has the right to use?”

- *Say “owns” rather than “has the right to use”*

The scorecard must follow the IHLCA wording. I suppose that the IHLCA uses “right to use” because some (or many) agricultural households use land that they do not own. That is, they have traditional usufruct rights, or they are sharecroppers, or they own land without formal title, or they rent land in. The IHCLA wants to capture all land that the household can, regardless of ownership.

- *The quality of land varies by region, so the relevant groups may vary too. For example, five acres in one region may indicate being better-off, but not in another region. Examples are low-land and up-land plots with different fertility and thus different values. Likewise, values of land in the delta differ across fresh-water versus salt-water areas. In the delta, someone might own 10 acres and still be poor, while in Shan and dry areas, 1–5 acres could be associated with poverty*

It makes sense that the value of land—and thus the association between area of land owned and poverty—varies by region. Nevertheless, for Myanmar as a whole, the general pattern is that more land is associated with less poverty.

Also, these things are linked with other scorecard indicators. Land is just one indicator in a group of 10. If land is off in some regions, other indicators pick up the slack.

The indicator is admittedly imperfect, but hopefully simplifying the question and the response options will help. I judge it important to have at least one agricultural indicator, as Myanmar is largely agricultural and land is the main production asset for the most households. This indicator and the next one (*le* paddy land) are by far the best agricultural indicators. I prefer this one over *le* paddy land because it seems less regionalized (even though it is still regionalized).

- *Please reconsider the grouping of land size*

In my first tests, I grouped the land in as narrow increments as statistically possible. (At least 5–10 percent of households must be in each response option.) Based on the results, I combined groups with the same point values. I would prefer greater granularity, but the data do not support it.

- *It is unlikely that the answer to this question will be verified*

I agree. What matters is that the household will probably be honest. Most households have a good idea of the size of their land holdings. Furthermore, answers could—in principle—be verified, and this will help households to be forthright. Of course, some households will misrepresent themselves, as they must have in the IHLCA too.

- *This does not apply to non-agricultural households*

Household with no agricultural land are covered by the response option of zero acres of agricultural land.

- *Enumerators may need help converting traditional units of land measurement to acres*

I also worried about this. Mr. Nyan Lin of the IHLCA Technical Committee said that IHLCA enumerators did not get any specific help with conversion factors because these are almost always unnecessary, as households know the area of their land in acres. Thus, the poverty scorecard should not give guidance either. Guidance would increase accuracy, but it would make the scorecard more accurate than the IHLCA, and that would, ironically, decrease the accuracy of the scorecard estimates of poverty.

17. How many total acres of *le* (paddy) land does any member of the household have the right to use?
- A. None
 - B. Has no *le* land but does have other agricultural land
 - C. Up to 1.9
 - D. 2.0 to 4.9
 - E. 5.0 or more

- *Paddy might not be common in some areas*

Good point. This is one reason that I prefer the indicator or overall agricultural land. Nevertheless, it is likely that areas with paddy land are less poor overall than other areas without paddy, making this a proxy for an area's general economic status.

- *The quality of *le* paddy land are varies between fresh-water and salt-water areas in the delta (fresh-water land is more valuable)*

See response on this and similar issues for previous indicator.