

CHAPTER FIVE SURVEY AND SCORING THE INDIVIDUAL DEPRIVATION MEASURE

IN THIS CHAPTER, WE PRESENT THE SET OF DIMENSIONS AND INDICATORS THAT COMPRISE OUR INDIVIDUAL LEVEL MULTIDIMENSIONAL MEASURE OF POVERTY AS WELL AS THE SURVEY QUESTIONS AND METHODS THAT CAPTURE INFORMATION NEEDED TO GATHER THESE INDICATORS AT AN INDIVIDUAL LEVEL.

In order to measure deprivation at the individual level and to be able to reveal intra-household variation, we needed to design a system to survey multiple individuals within a household. We believe that this information should be collected for adults only, as different questions and indicators would be needed for children, and the measurement of child poverty was not the focus of our first two phases.⁶⁴ After extensive discussion with our data collection partners and external consultants, we determined the best method of sampling individuals was to randomise the selection of households and then to attempt to interview every adult member of the household. This method allowed for investigating in depth the intra-household distribution of deprivation, although it may have introduced a small amount of bias if some household members were systematically less willing or available to participate (such as men in employment away from the household). From each individual survey we were able to calculate an individual level IDM score to be used for the purposes of identifying:

1. Whether an individual is deprived
2. How deprived an individual is
3. The components of the individual's deprivation

In addition to capturing information necessary for the identification stage of poverty measurement, the survey captures additional information about the individual's life circumstances that might be relevant for the purposes of poverty analysis. For example, the enumerator records the participant's

age, religion, language most commonly spoken, schooling completed and whether s/he is affected by disability.⁶⁵ This will allow for an investigation of whether and how poverty varies according to these variables. Personal information is also gathered about each member of participating households who are not themselves respondents (this includes children), which would allow investigation of potential correlations between individual deprivation levels and specific features (such as disability) of other household members.

The survey below includes a scoring system for the indicators in each dimension. As outlined in the previous chapter, the survey generates categorical information for one or more indicators for each of 15 dimensions. This categorical information is then placed in an ordinal ranking and placed on an interval scale from 1 to 5. This 1 to 5 interval scale is then re-weighted both within and across dimensions and aggregated to produce a composite score of deprivation. Some dimensions contain more indicators than others. Multiple indicators are aggregated within the dimension by averaging them before aggregation occurs across dimensions. Therefore, having more indicators does not mean that a dimension receives greater weight in a composite figure.

Survey dimensions, indicators, questions

Many of the survey questions are drawn from existing or recently developed multi-topic surveys. The table opposite provides the module name, the source of the survey questions, and the indicators the module will generate.

We have included in the survey a number of questions that were not used in scoring. These have been included for one of two reasons: either we considered that the information might be useful aside from the scoring; or we thought that the information might be useful for scoring purposes but had some reservations and therefore took the opportunity of the trial to test it. For

⁶⁴. For the third phase we defined adults as age 18 and older. The reasons for not focusing on children in this research were noted in chapter one. Our initial thinking re extending the IDM to measure child poverty which we consider a priority is outlined in chapter seven.

⁶⁵. The survey incorporates a brief set of questions on disability to screen for limitations in basic activity functioning. The questions were developed for use in census or similar multi-topic survey contexts where only brief information can be sought on any one topic 'to provide comparable data cross-nationally for populations living in a great variety of cultures with varying economic resources. The objective was to identify persons with similar types and levels of limitations in basic activity functioning regardless of nationality or culture.' (United Nations Statistical Commission. (2007). Report of the Washington Group on Disability Statistics: Note by the Secretary-General. Thirty-eighth session, 27 February-2 March 2007, E/CN.3/2007/4. Available at <http://unstats.un.org/unsd/statcom/doc07/2007-4e-Disability.pdf>) United Nations Statistical Commission, Thirty-eighth session, 27 February-2 March 2007, Report of the Washington Group on Disability Statistics: Note by the Secretary-General E/CN.3/2007/4. Available at <http://unstats.un.org/unsd/statcom/doc07/2007-4e-Disability.pdf>). Use of these questions also recognises that in contexts where disability is associated with significant discrimination and stigma, simply asking respondents whether they have a disability may result in significant under-reporting of functional limitations.

example, we asked about water treatment, because this is recommended in UNICEF guidelines, but we did not include it in the scoring, in part because we have reason to think that survey questions evaluating water treatment are not a reliable guide to whether water is in fact suitable for use, and in part because we prefer to focus on access to clean water. In the case of hunger, we include a question on hunger in the last 12 months to check if we get seasonal differences, but we don't think that recall over 12 months will be reliable enough for scoring purposes.

MODULE household characteristics	SOURCE multiple	INDICATORS n/a
A. financial status	DHS	Asset Index
1. Food/ Nutrition	FANTA	Hunger in last 4 weeks
2. Water	WHO, UNICEF, new	Water source, water quantity
3. Shelter	DHS, new	Durable housing, homelessness
4. Health Care/ Health	CWIQ, WHS	Health status, health care access
5. Education	IHSN, DHS, new	Schooling completed, literacy and numeracy
6. Energy/ Cooking Fuel	DHS, new	Source of cooking fuel, access to electricity
7. Sanitation	UNICEF, WHO	Primary toilet, secondary toilet
8. Family Relationships	OPHI/WEAI, new	Control of decision-making in household, supportive relationships
9. Clothing/Personal Care	New	Protection from elements, ability to present oneself in a way that is socially acceptable
10. Violence	OPHI missing dimensions	Violence experienced in last 12 months, perceived risk in next 12 months
11. Family Planning	DHS, new	Access to contraception, control over use
12. Environment	New	Exposure to environmental harms
13. Voice	WEAI/ OPHI	Ability to participate in public decision-making, ability to change community
14. Time-use	Various time-use surveys, WEAI	24 clock (labour burden, leisure time)
15. Work	OPHI	Status, safety (paid and unpaid work)

CWIQ Core Welfare Indicators Questionnaire
DHS Demographic and Health Survey
FANTA Food and Nutrition Technical Assistance project
IHSN International Household Survey Network
OPHI Oxford Poverty and Human Development Initiative
UNICEF United Nations Children's Fund
WEAI Women's Empowerment in Agriculture Index
WHO World Health Organisation
WHS World Health Survey

TABLE 11: SURVEY DIMENSIONS AND INDICATORS

Asset index as a measure of financial status

In theory, a measure of an individual's financial status should be sensitive to some or all of the following areas of her financial life: the income (and other cash transfers) she receives, her consumption (or consumption expenditure), her assets, her debts and her access to suitable financial products (such as credit, savings accounts, insurance and money transfer). In developing country contexts, it is difficult and time consuming to gather much of this information. As noted elsewhere in this report, we considered it important to develop a manageable survey that is feasible to administer in a variety of contexts, in both technical and cost terms. This influenced our decisions about how to measure various dimensions, including financial status.

For the purposes of our survey, we use a simple asset index as an approximate measure of financial status. The index is absolute, and meant to be comparable across contexts. It is captured at the household level, as many assets are commonly shared by household members. We follow Hohmann and Garenne (2003, 2009) who calculate an absolute asset index based on the number of 'modern' goods owned in a household.⁶⁶

Question: Does your household, or any member of your household, possess: a radio; a television; a refrigerator; a bicycle; a motorcycle; a car or truck?⁶⁷

From other parts of the survey, we also determined whether participants have electricity, adequate floor, wall, and roofing material, whether they have piped drinking water, how far away their source of drinking water is and whether they have a flushing toilet. This information is used for scoring in relation to the relevant dimension.

For each asset, the household receives either a 0 (no possession) or 1 (possession). The assets are then summed, with a lowest possible score of 0, and a highest possible score of 12.

Scoring:

- 1 = Extremely poor (0 or 1)
- 2 = very poor (2 or 3)
- 3 = Poor (4 or 5)
- 4 = At risk (6 or 7)
- 5 = Not poor (8 or more)

⁶⁶. This is in contrast to the DHS asset index, which is relative to the country in which the survey is being conducted and verified against consumption data and therefore does not weight equally all modern assets.

⁶⁷. This question is used to calculate the Garenne and Hohmann asset index. We also asked about possession of a tractor, a computer, an internet connection and land, but didn't include responses in the scoring.

Dimensions and indicators of multidimensional deprivation

Below are the survey questions, indicators and scoring guides for all 15 dimensions.⁶⁸ As previously mentioned, some dimensions have multiple indicators, while other dimensions have a single indicator. In the case of multiple indicators, indicator scores are averaged. In some dimensions, having a score at each possible interval is unfeasible. This is because the underlying categorical information does not easily fit into 5 categories. In those cases, an individual is still scored on the 1 to 5 scale but may be ineligible for one or more levels (for example, an individual cannot receive a score of 3 in the health status indicator—only a 1, 2, 4, or 5).

1. Dimension: Food/Nutrition

Indicator: Hunger

Questions

In the past 4 weeks, was there ever no food for you to eat because of lack of resources to get food? (If 'yes') How often did this happen? (Rarely, Sometimes, Frequently)

In the past 4 weeks, did you go to sleep at night hungry because there was not enough food? (If 'yes') How often did this happen? (Rarely, Sometimes, Frequently)

In the past 4 weeks, did you go a whole day and night without eating because there was not enough food? (If 'yes') How often did this happen in the past 4 weeks? (Rarely, Sometimes, Frequently)⁶⁹

(Rarely = once or twice, Sometimes = 3-10 times, Frequently = more than ten times)

Scoring

A respondent's initial responses receive a score of 0 for never, 1 for rarely or sometimes and 2 for frequently. A continuous scale score is calculated by summing the scores for each of the three questions.

- 1 = Severe hunger (cumulative score of 5 or 6)
- 2 = Moderate hunger (cumulative score of 3 or 4)
- 3 = Some hunger (cumulative score of 2)
- 4 = Little hunger (cumulative score of 1)
- 5 = No hunger (cumulative score of 0)

Additional question: The previous questions about hunger focussed on the last four weeks. I'm now going to ask you to think back about a longer period. In the past twelve months, was there ever no food for you to eat because of lack of resources to get food? (Yes/No)

This question was designed to identify if seasons impact hunger. However, at this point it is not used for scoring because of concerns about the reliability of recall over such a long period of time.

2. Dimension: Water

Indicator 1: Water source—distance and improvement

Question

What is the main source of drinking water for members of your household? How long does it take to reach the water source from your dwelling (one way)?

Scoring

- 1 = No improved source, more than 30 minutes from home
- 2 = No improved source, 30 minutes or less from home
- 3 = Improved source, more than 30 minutes from home
- 4 = Improved source, 30 minutes or less from home
- 5 = Improved source in dwelling

Indicator 2: Water quantity

Questions

How often do you have enough water to meet all your personal needs—including drinking, washing, and cooking? (Always, Often, Sometimes, Rarely, Never)

Scoring

- 1 = Never
- 2 = Rarely (1-2 days per week)
- 3 = Sometimes (3-4 days per week)
- 4 = Often (5-6 days per week)
- 5 = Always

Additional question

Do you treat your water in any way to make it safer to drink? (If 'yes') What do you usually do to the water to make it safer? (Filter, Iodine, chlorine or other mineral treatment, Solar water disinfection technique (SODIS), Boil, Other)

68. The household and individual surveys as used for the trial in the Philippines are available at www.genderpovertymeasure.org (in English and Filipino).

69. Available at: http://www.fantaproject.org/downloads/pdfs/HHS_Indicator_Guide_Aug2011.pdf. We do not follow FANTA's recommended scoring system at this time, as they provide a scoring scale of 0-6. This is a continuous variable scale, which we have modified to fit our 1 to 5 scoring model. We also shift from measuring hunger at the household level to measuring it at the individual level; but we preserve the question sequence.

3. Dimension: Shelter

Indicator 1: Housing materials and condition of the dwelling

The enumerator records the material used to construct the dwelling, including the wall material, roof material, flooring material, and the overall condition of the dwelling.

Scoring

- 0 = Natural
- 1 = Rudimentary
- 2 = Finished

(Descriptions of Natural, Rudimentary, and Finished follow DHS guidelines.)

A score is calculated for each of walls, floor, and ceiling, giving a possible total score of 6 points.

The condition of the dwelling is scored as follows:

- 1 = Very bad condition
- 2 = Poor condition, a lot of damage
- 3 = Moderate condition
- 4 = Good condition, minor wear and tear
- 5 = Excellent condition

Scoring of the overall dimension:

- 1 = Materials 0 to 2
- 2 = Materials 3-4, or 5, dwelling is in poor or very poor condition
- 3 = Materials 5, and dwelling is in moderate condition, or materials 6 and dwelling is in poor or very poor condition
- 4 = Materials 6, and state of dwelling is moderate
- 5 = Materials 6, and dwelling is in good condition

Indicator 2: Homelessness

Questions

In the last year, did you ever sleep outdoors, in public places such as bus or railway stations, or in temporary shelters provided by government or non-government organisations, because you did not have access to suitable shelter of your own?

Approximately how many nights in the last year did you sleep in the conditions described in the previous question? (Approximate number of nights)

It is difficult to measure homelessness through household surveys, given the nature of the phenomenon. The response to the question on homelessness does not affect an individual's scoring on shelter, unless she has been homeless for at least seven days in the last year. In

this case, homelessness counts as a substitute indicator, replacing housing materials/condition, and the respondent scores 1 out of 5 for this dimension.

Additional question

With how many other people did you share the room in which you slept last night?

This question was not scored due to uncertainty about the size of the room in which people were sleeping, and a view that many small poor families that have little crowding are living with very poor quality housing materials and/or a dwelling in very poor condition. They should not be 'compensated' for their small size in scoring shelter just because they are not as overcrowded as families in some larger dwellings.

4. Dimension: Health/health care

Indicator 1: Health status

Questions

When was the last time you had a significant illness or injury?

Did this illness or injury make it impossible or very difficult to perform your usual paid or unpaid activity?

How long was it difficult or impossible for you to perform your usual paid or unpaid activity because of your illness or injury?

Scoring

- 1 = More than 2 weeks
- 2 = 1-2 weeks
- 4 = Less than 1 week
- 5 = No problems (last illness more than one year ago or last illness did not make it difficult or impossible to perform usual activity)

Indicator 2: Health care access

Questions

The last time you had an illness or injury that needed health care, did you receive this care?

From whom did you receive health care?

Scoring

- 1 = No treatment or treatment from a traditional healer
- 3 = treatment from a community health worker, nurse or midwife
- 5 = Treatment from a doctor, dentist, physiotherapist or chiropractor

Indicator 3: Health care quality

Question

Were there any significant problems with any of the following: The skill of the practitioner, the cleanliness of the treatment facilities, the availability of prescribed drugs, the level of respect with which you were treated, including the way in which issues were explained to you, the waiting time, the location of the health care provider? (Answers are yes/no)

Scoring:

- 1 = Three or more significant problems
- 2 = Two significant problems
- 3 = One significant problem
- 5 = No problems

Additional question

(For respondents who did not seek medical care even though their illness required it) What was the main reason that you did not seek medical care?

A simple average of the health care access and health care quality scores is calculated to provide a health care access/quality score.

For all males and for females who were neither pregnant at the time of the survey nor pregnant within the last three years, the health dimension score is the average of their health status score and their health care access/quality score.

Women who are pregnant at the time of the survey or who were pregnant within the previous three years are asked a series of questions about the number of pre-natal visits (made and/or planned), the provider of pre-natal care (traditional birth attendant, nurse, midwife, doctor) and where they gave birth or plan to give birth (hospital, community health facility, at home). Women who gave birth as a result of a pregnancy within the last three years are also asked who attended them during the birth.

Pregnancy scoring:

Pre-natal:

- 1 = No visits
- 2 = One or two visits to a traditional birth attendant
- 3 = Three or more visits to a traditional birth attendant or one visit to a nurse, midwife or doctor
- 4 = Two visits to a nurse, midwife or doctor
- 5 = Three or more visits to a nurse, midwife or doctor

Birth—currently pregnant (intended place of birth):

- 1 = At home
- 3 = In a community health facility
- 5 = In hospital

Birth—pregnant within last three years:

- 1 = No birth attendant
- 2 = Traditional birth attendant
- 3 = Attended by a nurse, midwife or doctor at home
- 4 = Attended by a nurse, midwife or doctor in a community health facility
- 5 = Attended by a nurse, midwife or doctor in hospital

For women currently pregnant or pregnant within the last three years, a score for pre-natal care and birth attendance is calculated by averaging the two scores. This score substitutes for general health care access for this group of respondents. The overall health dimension score for these respondents is then calculated by averaging the health status and the pregnancy pre-natal care/birth attendance scores.

Additional questions

All women are asked whether they have given birth and, if so, how often. Women pregnant at the time of interview or within the previous three years who are not seeking/did not seek pre-natal care are asked why they did not. Answers to these questions do not affect the scoring.⁷⁰

Our approach to the dimension of health/ health care is one way in which the IDM seeks to be gender sensitive. Pregnancy and maternal health care and access are significant sources of mortality and morbidity for women and their families in developing-country contexts, and among the most significant and risky health-related events that women experience in their lifetimes. Access to appropriate care during pregnancy and whether birth is attended by a health care professional are closely linked to pregnancy outcomes and the burden of ill health, injury and disability experienced by women and their families. It could be argued that assessing health care access and health status as part of multidimensional poverty measurement in a way that excludes pregnancy and birth-related care (because it is not something that can be experienced by and measured for both women and men) builds in gender bias given the overall significance of pregnancy and birth as health events. However, there are challenges in incorporating pregnancy and birth-related care in a multidimensional poverty measure given that it is not something that is experienced by both women and men.

The research team considered a number of potential ways of incorporating pregnancy and birth-related care into the IDM, including by adding it as an additional indicator in the health dimension and then summing and averaging for relevant women. We felt that this could give insufficient weight to pregnancy and birth-related health care, and that it was simpler to substitute pregnancy-related health care and access for general health care and

70. Part of the reason for the inclusion of this question was to have a stand-alone indicator of infant mortality.

access for all women currently pregnant or pregnant in the last three years. The approach is spelled out below.

For males, and for females who are not currently pregnant and have not been pregnant in the last three years, the indicators of access to health care and quality of health care come into play, although quality of health care only counts if the health care provider was a community health worker or above. If someone was treated by a traditional healer, her score for health care access and health care quality is 1. Someone who did not receive health care also scores 1. For all others, their score is the average of their health care access and health care quality scores. The overall health dimension score is the average of access/quality and health status scores.

For women who are currently pregnant, their pregnancy score is a function of the number of pre-natal visits already made or planned, and the qualifications of the health care provider. If the sum of visits already made and planned is zero, they score a 1. If the provider is a traditional birth attendant, they score 2, regardless of the number of visits.⁷¹ If the sum of made and planned visits to a trained practitioner is 1 or 2, they score a 3. If the sum of visits already made and planned to a trained practitioner is at least 3, they get a 5. Their health dimension score is the average of health status and pre-natal care.

For women pregnant within the last three years, their pregnancy/birth score is a function of pre-natal care and attendance at the birth. Pre-natal care is treated as for women who are currently pregnant. Attendance at birth recognises that risk is reduced when a birth is attended by a traditional birth attendant, compared with birthing without assistance. Births attended by qualified personnel score higher than other births, with scoring reflecting the evidence that the location of the birth, particularly if it is in a hospital, significantly improves outcomes. The overall dimension score for these women is the average of health status and pregnancy/birth attendance.

5. Dimension: Education

Indicator 1: Completed schooling

Questions

Have you ever attended school?

How many years were you in formal schooling?

What is the highest education level you completed?⁷²

Scoring

- 1 = Little or no school
- 2 = Partial primary
- 3 = Completed primary

4 = Some secondary

5 = Completed secondary or higher⁷³

Indicator 2: Competence: Reading, writing, and arithmetic

Questions

Are you able to read at all? (If 'yes') Please read the following sentences aloud to me.

Are you able to write at all? (If 'yes') Please write two sentences about what you did yesterday.

Are you able to do some arithmetic? (If 'yes' Please perform the following calculations (addition & subtraction; multiplication & division).

For the reading exercise, the respondent was asked to read a short paragraph and then the enumerator marked down the respondent's reading level. For the writing exercise, the respondent wrote two sentences about what she did yesterday. For the numeracy exercise, the respondent was asked to write the answer for a simple math problem (e.g., $3+7-2+5=?$) and a more difficult problem (e.g. $(14 \times 5) \div 2 = ?$).

Reading scores

- 1 = Not able to read (says can't read, or reading competence is very limited)
- 3 = Basic skills (able to read only parts of the sentences)
- 5 = Advanced skills (able to read both sentences competently)

Writing scores

- 1 = Not able to write (either does not write sentence, or sentence is illegible or does not make sense)
- 3 = Basic writing skills (legible and makes sense, but poor grammar and spelling)
- 5 = Advanced writing skills (legible, makes sense, good grammar and spelling)

71. This assumes that engaging with a traditional birth attendant pre-natally increases the likelihood of identifying a problem with the pregnancy compared with no engagement but to a lesser extent than engagement with a formally qualified practitioner (nurse, midwife or doctor), and that more engagement with trained professionals over the course of a pregnancy is better.

72. These questions are recommended as the best set of three to capture information on a person's schooling See the International Household Survey Network. (2009). *How (well) is Education Measured in Household Surveys? A Comparative Analysis of the Education Modules in 30 Household Surveys from 1996-2005*. IHSN Working Paper 2. Available at www.ihsn.org/home/sites/default/files/resources/IHSN-WP002.pdf. This review also recommends our second set of questions, testing literacy and numeracy, as preferable to self-reporting on literacy and numeracy.

73. The scoring of the highest grade completed may need to vary across contexts depending on the number of years of formal schooling expected in the country to complete secondary school. There is tension here between accommodating diverse educational requirements and ensuring comparability across context. Additionally, scoring may need to recognise variation in the grade level that marks the transition between primary and secondary school. For example, in most of Australia, secondary school starts at grade 7.

Arithmetic scores

- 1 = Not able to do math, or both answers incorrect
- 3 = Correctly answers one of the two problems
- 5 = Correctly answers both problems

The reading, writing and arithmetic scores are summed and divided by three to produce a reading/writing/arithmetic score.

The education dimension score is the average of the schooling and reading/writing/arithmetic scores.

6. Dimension: Energy

Indicator 1: Cooking fuel/smoke exposure

Questions

What is the primary source of cooking fuel in this household? Do you have a secondary source of cooking fuel that you use regularly?

(If 'yes') What is your secondary source of cooking fuel?

How much time on average do you spend each day exposed to smoke and fumes from the burning of cooking and/or heating fuel?

Do you experience any health problems, such as headaches, dizziness or difficulty in breathing from exposure to the smoke and fumes from your cooking and/or heating fuel? (If 'yes') How would you rate these problems (severe, moderate, minor)?

Where a secondary cooking fuel is regularly used, scores are generated for both primary and secondary cooking fuels. An overall cooking fuel/ smoke exposure score is calculated by averaging the two scores.

Scoring

- 1 = Dirty fuel (charcoal, firewood, animal dung, crop residue)
- 3 = Clean fuel (kerosene, gas, electricity), but health problems from smoke exposure
- 5 = Clean fuel (kerosene, gas, or electricity), and no health problems from smoke exposure

Additional questions

What type of cooking stove is usually used in your house?

Where is cooking usually done?

Indicator 2: Electricity (household indicator)

Questions

Does your dwelling have access to electricity?

Approximately how many hours per day on average does your dwelling have electricity?

Scoring:

- 1 = No access
- 2 = Up to 4.9 hours
- 3 = -9.9 hours
- 4 = 10-19.9 hours
- 5 = 20 or more hours per day

Additional question

Not used for scoring: How reliable is your dwelling's access to electricity? (very unreliable, somewhat unreliable, quite reliable, very reliable)

The energy dimension score is calculated by adding the cooking fuel/smoke exposure and the electricity access scores and dividing by two.

7. Dimension: Toilet

Indicator 1: Primary toilet use⁷⁴

Question

What toilet facilities do you normally use when you are at home?

- 1 = Bush, field or river
- 2 = Bucket or other container, periodically removed from dwelling
- 3 = Pit latrine without slab
- 4 = Pit latrine with slab
- 5 = Ventilated improved pit latrine
- 6 = Public flush toilet
- 7 = Private flush toilet

Scoring

- 1 = Not improved (1 and 2 above)
- 2 = Pit latrine without slab (3 above)
- 3 = Improved shared pit or latrine (4, 5 above)
- 4 = Public flushing toilet (6 above)
- 5 = Private flushing toilet (7 above)

Indicator 2: Secondary toilet use

Question

Do you regularly use a second toilet facility (for example at your workplace or where you spend time outside the house during the day)?

74. The list of toilet options and the scoring are drawn from the WHO/UNICEF Joint Monitoring Program, www.wssinfo.org.

If 'yes' What is the second most common toilet facility that you use?

The scoring is the same as for the primary toilet.

Note: The secondary indicator here reflects that a person's primary and secondary toilet facilities may differ considerably. For example, you might have access to adequate sanitation at home, but have none at school or your place of work or in your daily activities.

If a secondary toilet is regularly used, the dimension score is the average of the primary and secondary scores. If not, the dimension score is the primary toilet score.

8. Dimension: Decision-making and personal support

Indicator 1: Control over decision-making

Question

In general, how much control do you have over personal decisions that have a major impact on your life, such as whether you will go out of the house into the community, with whom you will associate outside of your household, or when and from whom to seek health care for yourself?

Scoring:

- 1 = No Control
- 2 = Very Little Control
- 3 = Some Control
- 4 = A Fair Amount of Control
- 5 = Full control

Indicator 2: Personal support

Question

If you were in trouble, how much support could you count on from friends and family?

Scoring:

- 1 = No Support
- 2 = Very Little Support
- 3 = Some Support
- 4 = A fair amount of support
- 5 = All the support that I need

The dimension score is a simple average of the control over decision-making and personal support scores.

9. Dimension: Clothing and personal care

Indicator 1: Protection from the elements

Question

To what extent does your clothing and footwear protect you from the weather and from hazards in your environment, such as broken glass where you walk?

Scoring:

- 1 = No protection
- 2 = Very little protection
- 3 = Some protection
- 4 = A fair amount of protection
- 5 = Good protection

Indicator 2: Personal care/presentation in public

Question

To what extent are you able to present yourself in public, in terms of clothing, body odour and grooming, in a way that is acceptable by the standards of your community?

Scoring:

- 1 = Never
- 2 = Rarely
- 3 = Sometimes
- 4 = Often
- 5 = Always

The dimension score is a simple average of the protection from the elements and personal care scores.

10. Dimension: Violence

Indicator: Freedom from violence⁷⁵

Questions

May I ask you some questions about your experience of violence? (If 'yes', the following questions are asked. If 'no', the interviewer moves to the next module.)

In the past year, did you experience being hit, slapped, shoved, pushed, punched, or kicked by anyone?

In the past year, did you experience being beaten, stabbed, burnt, or otherwise attacked with a weapon, such as a bottle, knife, gun, club, hot liquid, or explosive device?

75. This module is from Diprose, R. (2007). *Safety and security: a proposal for internationally comparable indicators of violence*. Centre for Research on Inequality, Human Security and Ethnicity, in collaboration with Oxford Poverty and Human Development Initiative. University of Oxford. Available at <http://r4d.dfid.gov.uk/PDF/Outputs/inequality/wp52.pdf>.

In the past year, did anyone use physical force or threats to make you or try to make you have sexual intercourse or perform other sexual acts against your will?⁷⁶

If you answered yes to any of the preceding questions, were you subject to any of the violent events more than once?

In the past year, did anyone regularly insult, belittle or humiliate you, make you feel bad about yourself, or try to intimidate you (for example by yelling or smashing things)?

In the next 12 months, do you think it is likely that you will be subject to any of the violent events described in the previous questions? (yes or no)

Scoring:

- 1 = Multiple violent incidents
- 2 = One violent incident
- 3 = No violent incidents, but perceived risk
- 5 = No violent incidents, and no perceived future risk

11. Dimension: Family planning

Indicator 1: Access to contraception

Question

Do you or your partner have ready access to any types of contraception? (If 'yes') Which methods do you or your partner have ready access to?⁷⁷

Scoring

- 1 = No options
- 3 = One safe option
- 5 = More than one safe option

Indicator 2: Use of contraception

Question

To what extent, if at all, do you face barriers to using the contraceptive methods you listed above to prevent, limit or space pregnancies for example from your family, from a partner, or from religious authorities?

Scoring

- 1 = Face severe barriers
- 3 = Face some barriers
- 5 = Face no barriers

The dimension score is a simple average of the access and use scores.

This module is not designed to be asked of females beyond reproductive age. It is anticipated that some other respondents will not consider access to contraception to be relevant to their current life circumstances. Relevant answer coding is used to accommodate these respondents.

12. Dimension: Environment

Indicator: Environmental problems

Questions

Are any of the following a significant problem for you, either at or near home or at other:

- 1 = Places where you spend a lot of time?
- 2 = Large amounts of rubbish or a waste disposal site
- 3 = Open sewage
- 4 = Air pollution (air that smells bad or makes your eyes or throat sting)
- 5 = Pools of water where mosquitoes or other disease carrying insects breed
- 6 = Stores of unsecured agricultural or industrial chemicals and waste
- 7 = Heavy vehicle traffic for much of the day
- 8 = High levels of noise other than from vehicle traffic for much of the day
- 9 = Any other significant environmental hazard

⁷⁶. We are aware that asking questions about violence in general and sexual violence in particular raises difficulties for the ethics and accuracy of the survey. However, given its significance in the lives of poor women and men, and its costs to individuals, families and communities, the research team considered it important to find a way to safely include violence in a measure of gender-sensitive multidimensional deprivation. We sought input from a number of academics with experience of researching violence against women; drew on the best available guidance regarding researching violence against women, including about the importance of a safe, private and supportive interview context for response rate and accuracy; and provided training for enumerators around the need for sensitivity and ensuring privacy. An introduction to this question was read to each respondent explaining our reasons for asking about violence, stating that no questions would be asked about the location of any acts of violence or about the perpetrators, and emphasising that all answers would be kept confidential. The right of the respondent not to answer this module was stressed. Respondents were then asked if they were prepared to answer questions on this topic. We used self-completion for the violence module, with a folder obscuring the respondent's markings on the answer sheet from the enumerator and a sealed envelope to hold the responses. Icons illustrating the kind of violence being asked about in each question were used on the response sheet to enable completion by respondents without formal literacy. A response rate of 90% in the trial in the Philippines suggests that these provisions, in combination, assured respondents of their safety and privacy in responding to the questions.

⁷⁷. The list of options for family planning methods in the DHS are female sterilization, male sterilization, IUD, Injectables, Implants, Pill, Condom, Female Condom, Diaphragm, Foam/Jelly, Lactational Amenorrhea Method, Rhythm method, withdrawal, other modern method, other traditional method. Notes to the survey enumerator say 'Other commonly used methods may be added to the list, such as contraceptive patch, contraceptive vaginal ring, or sponge'. After considerable discussion within the team, we decided not to count any traditional methods [rhythm method, withdrawal, lactational amenorrhea method (breastfeeding to delay fertility)] as 'safe' given their lack of reliability.

Scoring

- 1 = More than two environmental problems
- 2 = Two environmental problems
- 3 = One environmental problem
- 5 = Zero environmental problems

13. Dimension: Voice in the community

Indicator 1: Ability to participate in community decision-making

Question

To what extent are you able to raise issues in your community that you feel strongly about, such as crime in the community, the way government programs are implemented or the way you or members of your family are treated at work or by other community members?

Scoring

- 1 = Not at all
- 2 = With great difficulty
- 3 = With some difficulty
- 4 = Fairly easily
- 5 = Very easily

Indicator 2: Ability to change your community

Question

To what extent do you think that people like you can change things in their community if they want to?⁷⁸

Scoring

- 1 = Not at all
- 2 = With great difficulty
- 3 = With some difficulty
- 4 = Fairly easily
- 5 = Very easily

The dimension score is the average of the scores of the two indicators.

14. Dimension: Time-use/labour burden

Indicator: Labour burden as percentage of 24 hours

Question

On the basis of a 24-hour diary of activities completed for the previous day, the enumerator calculates the hours of paid and unpaid work and formal study undertaken by the participant Secondary work/study time (i.e., activities

carried out while undertaking a primary activity, such as keeping an eye on children while enjoying leisure) is included in scoring this dimension.

Scoring

- 1 = 16 hours or more of paid and/or unpaid work and/or formal study
- 2 = 14-15.9 hours
- 3 = 12-13.9 hours
- 4 = 10-11.9 hours
- 5 = Less than 10 hours

Additional question

How typical was the 24 hour period we have just discussed in terms of the amount of paid and/or unpaid work that you did? (much more than usual, about the same, much less than usual)⁷⁹

15. Dimension: Paid and unpaid work: Risk and respect

Indicator 1: Risk (paid and unpaid work)

Question

Have you suffered any injury, illness, disability, or other physical or mental harm from your paid (unpaid) work in the last 12 months?

If yes, what effect did this injury, illness or other harm have on you? (a long-term effect that prevents you from working at all, a long-term effect so that you can't continue to perform the same work, a long-term effect but you are able to carry on in the same work, no long-term effect)

Are you concerned that your paid/unpaid work will cause you physical or mental harm in the future? (very concerned, somewhat concerned, not very concerned, not concerned at all)

Note: These questions are asked separately about paid and unpaid work, as individuals may have very different experiences in each kind of work.

78. These questions are drawn from Ibrahim, S., Solva, I. & Alkire, S. (2004). Agency and Empowerment: A Proposal for Internationally Comparable Indicators. Working Paper. Oxford Poverty and Human Development Initiative. Available at www.ophi.org.uk/wp-content/uploads/OPHI-wp04.pdf.

79. This question was not used for scoring purposes. Because the measure of leisure time and labour burden relies entirely on a 24 hour clock from the preceding day, we wanted to evaluate whether that day was typical or atypical. For example, a survey covering a Sunday may not reveal a labour burden whereas a survey covering a Monday would.

Scoring

- 1 = Extremely dangerous paid/unpaid work (injured with long-term effect preventing any work)
- 2 = Very dangerous paid/unpaid work (injured with long-term effect preventing the same work as before)
- 3 = Somewhat dangerous paid/unpaid work (injured, can do the same work as before but very concerned about future harm)
- 4 = Slightly dangerous paid/unpaid work (injured but no long-term effect, little or no future concern)
- 5 = Not dangerous paid work (no injury, no perceived risk)

Total Risk Indicator calculated as average of both scores (assuming respondent answers for both). If the respondent only answers for a single kind of work, that score is used.

Indicator 2: Status (paid and unpaid work)

Questions

To what extent do you agree or disagree with the following statements?

Members of my community respect the paid/unpaid work I do (that is, my job is a respected one).

I am treated with respect when I do paid/unpaid work (this includes being free from physical and verbal abuse or demeaning treatment while working)

Scoring

- 1 = Extremely disrespected (strongly disagree)
- 2 = Somewhat disrespected (disagree)
- 4 = Not disrespected (agree)
- 5 = Strongly respected (strongly agree)

The score for this indicator for each of paid and unpaid work is the average of the scores for the degree of respect for the participant's paid/unpaid work and the respect shown the participant at their paid/unpaid work.

The overall indicator score is the simple average of the indicator scores for paid and for unpaid work (assuming respondent answers for both). If the respondent answers for only one of paid and unpaid work, that score is used.

Additional question

What is the main kind of paid/unpaid work that you regularly do?

DIMENSION - INDICATOR	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5 (AND ABOVE)
	SEVERELY DEPRIVED	VERY DEPRIVED	SOMEWHAT DEPRIVED	SLIGHTLY DEPRIVED	ADEQUATE FOR MINIMALLY DECENT LIFE
1. Hunger	Severe hunger	Moderate hunger	Some hunger	Little hunger	No hunger
2. Water-source (HH)	Not improved, more than 30 minutes from dwelling (one way)	Not improved, 30 minutes or less	Improved, more than 30 minutes	Improved, 30 minutes or less	Improved, in dwelling
Water-quantity	Never enough to meet personal needs	Rarely (1-2 days per week)	Sometimes (3-4 days)	Often (5-6 days)	Always
3. Shelter-materials and dwelling condition (HH)*	Very low quality shelter. Materials (at best a mix of natural and rudimentary)	Mostly rudimentary housing materials	Mixed quality shelter (good materials but dwelling in poor condition or moderate materials but dwelling in good condition)	Moderate quality shelter (all finished materials, condition of dwelling moderate)	Good quality shelter (finished materials in good condition)
4. Health care-access**	No treatment when needed or treatment not provided by a professional		Treatment provided by a community health worker, nurse, or midwife		Treatment provided by a doctor
Health care-quality**	3 or more significant problems	2 problems	1 problems		No complaints
Health care-status	Unable to perform (un)paid work due to illness for more than 2 weeks in the last 12 months	Unable to perform (un)paid work due to illness for 1 to 2 weeks in the last 12 months	Unable to perform (un)paid work due to illness for less than 1 week in the last 12 months		No illness' time off (un)paid work due to illness in the last 12 months
5. Education-completed	Little or no schooling (completed grades 0-2)	Some primary (completed grades 3-5)	Completed primary	Some secondary schooling	Completed secondary or above
Education-achievement	Not able to read, write, do arithmetic	Minimal literacy and numeracy	Moderate literacy and numeracy	Adequate literacy and numeracy	Fully literate and numerate
6. Energy-cooking fuel (primary & secondary) (HH) and harm from smoke	No clean fuel		Clean fuel but health problems from smoke		All clean fuel, no problems from smoke
Energy-access to electricity (HH)	No access	Up to 4 hours per day	5 to 9 hours	10 to 20 hours	More than 20 hours access
7. Toilet-primary & secondary	Not improved	Pit latrine without slab	Improved shared pit or latrine	Public flushing toilet	Private flushing toilet
8. Family relations-decision-making	No control	Very little control	Some control	Fair amount of control	Full control
Family relations-personal support	No support	Very little support	Some support	Fair amount of support	All the support needed
9. Clothing-protection	No protection	Very little protection	Some protection	Fair amount of protection	Good protection
Clothing-personal care	Never presentable	Rarely	Sometimes	Often	Always
10. Violence-experience and risk	Multiple violent incidents	One violent incident	No incidents, but perceived risk		No incidents, and no perceived risk
11. Family planning-access	No modern methods		One modern method		More than one modern method
Family planning-use	Severe barriers to use		Some barriers to use		No barriers to use
12. Environment	More than two environmental problems	Two environmental problems	One environmental problem		No environmental problems

13. Voice-participation (ability to raise issues in the community)	<i>Not at all</i>	<i>With great difficulty</i>	<i>With some difficulty</i>	<i>Fairly easily</i>	<i>Very easily</i>
14. time use-labour burden	<i>Excess burden (16 or more hours per day)</i>	<i>Significant burden (14-16 hours per day)</i>	<i>Moderate burden (12-14 hours per day)</i>	<i>Slightly burdened (10-12 hours per day)</i>	<i>Not burdened (10 hours or less per day)</i>
15. Paid/ unpaid work-status	<i>Extremely disrespected</i>	<i>Somewhat disrespected</i>		<i>Not disrespected</i>	<i>Highly respected</i>
Status of the paid/unpaid worker	<i>Extremely disrespected</i>	<i>Somewhat disrespected</i>		<i>Not disrespected</i>	<i>Highly respected</i>
Paid & unpaid work-risk	<i>Extremely dangerous (injured at work, unable to work long-term)</i>	<i>Very dangerous (injured at work, long-term unable to work as before)</i>	<i>Extremely dangerous (injured at work, unable to work long-term)</i>	<i>Slightly dangerous (injured at work, but no long-term impact and not concerned about future injury)</i>	<i>Not dangerous (no injury, no perceived risk)</i>
A. Wealth	<i>Extremely poor</i>	<i>Very poor</i>	<i>Poor</i>	<i>At risk</i>	<i>Highly respected</i>

* Note: Homelessness serves as a substitute indicator for housing materials and condition of the dwelling only when a person has been homeless for at least seven days in the past year.

**Note: Pregnancy module substitutes for health care access and quality when the respondent is pregnant or has been pregnant in the last three years.
 'HH' means household level indicator.

TABLE 12: SUMMARY CHART OF INDICATOR SCORING

SEE UPDATES