

INAUGURAL MEETING OF THE PACIFIC STATISTICS METHODS BOARD
3-4TH MAY 2018

THE ADVANTAGES OF THE CONSENSUAL APPROACH TO POVERTY MEASUREMENT
- Paper 5

Professor David Gordon, Dr Eldin Fahmy, Dr Alba Lanau, Joanna Mack, Dr Hector Najera
Townsend Centre for International Poverty Research, University of Bristol

Dr Shailen Nandy & Dr Marco Pomati
School of Social Sciences, University of Cardiff

Contact: dave.gordon@bristol.ac.uk

1. SUMMARY

The Consensual Deprivation approach is the best method currently available to measure multidimensional poverty as it is;

1. Based on a clear scientific theory and definition of poverty
2. Thirty five year history of continuous methodological development
3. Proven track record in over 50 countries
4. Provides the general public with a say in what constitutes acceptable living standards in their own countries, thus introducing a democratic element to the definition of poverty.
5. Method applicable to all countries and societies and it is the only method that can produce meaningful and comparable results in low, middle and high income countries
6. Easy to implement in diverse survey situations (e.g. different modes of collection) – with generally high response rates and respondent satisfaction
7. Results have been shown to be suitable, valid, reliable and repeatable
8. Results are not easy to obscure or distort
9. Allows for the analysis of intra-household disparities, e.g. between genders or generations within a household;
10. Can be used to separately assess the poverty of adults and children with age appropriate measures
11. Can be used to report on the Sustainable Development Goal Multidimensional Poverty target (SDG 1.2)
12. Socially realistic method that is easily understood & supported by both the public and policy makers, with results that are easy to understand and policy relevant

2. INTRODUCTION

The consensual or socially perceived necessities approach to measuring poverty has a long history. During the 1960's Peter Townsend developed the Relative Deprivation Theory of Poverty - the idea that the most objective and scientifically rigorous way to measure poverty was to measure how people lived and identify the level of income and other resources they needed not to become deprived. He argued that poverty can only meaningfully be measured relative to a person/households' society and culture (Townsend, 1962). Absolute conceptions of poverty based upon the views of experts, who often had little personally experience of poverty, would always be flawed and can quickly become outdated as societies and technology changes.

Townsend argued that *"Poverty can be defined objectively and applied consistently only in terms of the concept of relative deprivation. [...] Individuals, families and groups in the population can be said to be in*

poverty when they lack the resources to obtain the type of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs or activities.” (Townsend 1979, p. 31)

Thus, in Peter Townsend’s theory of relative deprivation, poverty can be defined as a lack of sufficient resources over time and ‘deprivation’ is an outcome of poverty. This is a scientific definition of poverty as it can be disproved and it is in theory applicable to all societies at all points in history. Townsend produced the first survey in 1968/69 which included multidimensional measures of material and social deprivation in order to study their relationship with income (broadly defined) and identify the optimum position of the poverty line (Townsend, 1979).

During the 1970s, the European Union adopted a relative deprivation definition of poverty which remains the current official definition across all 28 European Member States. Similarly, the idea of measuring multidimensional deprivation was subsequently adopted by Altimir at the UN Economic Commission for Latin America and the Caribbean (ECLAC), in the 1980s and is used across the South American continent to this day – called the Unmet Basic Needs (UBN) methodology (Altimir, 1980). Argentina statisticians Luis Beccaria and Alberto Minujin (1985) combined low income measures with UBN deprivation indicators to produce combined poverty measures although the method they used to do this (combined method i.e. you are poor if you have either a low income or are deprived) differed from the European approach (intersection method i.e. you are poor if you have a low income and are also deprived).

Townsend’s original survey was criticised for failing to distinguish choice from constraint (e.g. some rich people might choose to live like the poor). Joanna Mack and Stewart Lansley (1985) build on Townsend’s work to develop the advanced Consensual Deprivation methodology which both incorporates the views of the public in the definition of poverty and only identifies people as deprived if this is due to a lack of money/resources rather than due to their choices about how to live. Subsequent research during the 1990s and 21st Century has made continuous technical and operational advances which have improved the statistical rigour and robustness of the Consensual Deprivation methodology.

The Consensual Deprivation methodology is now used to produce official multidimensional poverty indicators in the European Union (Guio et al, 2017) and it has also been used by both National Statistics Offices and by academics in over 50 low, middle and high income countries in all regions of the world.

In the Pacific/Oceania region it has been used in government studies of poverty in New Zealand, Solomon Islands, Tonga and Tuvalu. The results have been discussed and approved by the Cabinets in New Zealand and Tonga¹. It has also been used in several academic studies in Australia (Saunders, 2011).

3. THE POVERTY CHALLENGE FOR NATIONAL STATISTICS

In 2015, the governments of the world agreed upon the 17 United Nations Sustainable Development Goals (SDGs), the primary goal of which is to eradicate poverty in all its forms during the 21st Century and to leave no one behind. Specifically, Target 1.1 is to ‘By 2030, eradicate extreme poverty for all people everywhere’ and Target 1.2 is to ‘By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.’ This is the first time there has been a global agreement to reduce multidimensional adult and child poverty. To date, this has been an intractable problem because the large majority of countries have neither official national definitions nor measures of multidimensional adult or child nor anti-poverty policies which specifically target children and young people.

An additional problem is that the other 16 SDGs have UN or international organisations that have the job of assisting countries with developing and monitoring SDG measures and policies. However, no organisation has the job of doing this for multidimensional poverty, which has been left to national governments alone.

¹ Bryan Perry and Viliami Fifita per comm

In many countries the National Statistics Offices (NSO) will be given the job of measuring and reporting on SDG Target 1.2 - multidimensional poverty – along with the rest of the SDG indicators. Thus the establishment of the Pacific Statistics Methods Board is timely, particularly in assisting with the synthesis and dissemination of best practice and new methodological advances to its members across the Pacific region.

4. WHAT IS PROPOSED?

Following discussion in Noumea, New Caledonia, in November 2014 and a presentation to the Pacific Statistics Steering Committee (PSSC) in Fiji in November 2016, it was proposed that a questionnaire module be adopted for inclusion in PICTs national surveys, including the HIES, DHS, and LF, to specifically examine and assess the extent of poverty in the Pacific region. The module consists of a short set of questions, which set out to ascertain the population's views about what constitutes an adequate standard of living in their country. This is done by asking what items/activities people thought were essential/necessities, which everyone should be able to afford and no one should have to do without. Such question modules have been developed and used over many decades, and form the basis of scientific assessments of poverty across many low, middle and high income countries.

To date, consensual deprivation question modules have been successfully run in the Pacific Region in the Tonga 2012 DHS survey (as part of the feasibility study), the Tonga 2015/16 HIES survey, the 2015/16 Tuvalu HIES and the Solomon Islands 2016 DHS/MICS. In addition the Tongan National Statistics Office (NSO) has provided technical assistance and support to the Ugandan Bureau of Statistics (UBOS) and helped them to successfully include consensual deprivation question modules in the 2015/16 Uganda National Panel Survey (UNPS) and the 2016/17 Uganda National Household Survey (UNHS) and also in a 2017 survey of Refugee Camps. This is a good example of South-South cooperation between NSOs.

5. SURVEY METHODOLOGY

In order to measure poverty and deprivation consistently and comparatively across all countries and cultures, it is necessary to measure exclusion from the normal social activities and the lack of common possessions in each society resulting from the inadequate command of sufficient resources over time. The accuracy and policy relevance of poverty measures can be greatly enhanced if the views of the population (and particularly the 'poor') can be incorporated into the measure of poverty. There are several methods for achieving this, such as the use of focus group methods, incorporating nationally or internationally agreed standards into the measure (such as minimum standards of education, water quality, housing quality, etc. found in the constitutions of some countries) and/or using the 'consensual' or 'perceived deprivation' approach to measuring poverty by investigating the public's perceptions of minimum needs. The 1983 Breadline Britain study pioneered this method:

'This study tackles the question 'how poor is too poor?' by identifying the minimum acceptable way of life for Britain in the 1980s. Those who have no choice but to fall below this minimum level can be said to be 'in poverty'. This concept is developed in terms of those who have an enforced lack of socially perceived necessities. This means that the 'necessities' of life are identified by public opinion and not by, on the one hand, the views of experts or, on the other hand, the norms of behaviour per se.'
(Mack and Lansley, 1985)

Mack and Lansley defined 'necessities' as possessions and 'activities' as items that every family (or person) should be able to afford and that nobody should have to live without. An item regarded as necessary by at least 50% of respondents was seen as a "socially perceived necessity". Since the 1980s, this methodology has been successfully used to measure poverty in Europe and across the world in low, middle and high income countries - for example, Bangladesh (Mahbub Uddin Ahmed, 2007), Benin (Nandy and Pomati, 2014), South Africa (Noble, Ratcliffe and Wright, 2004; Wright, 2008; Barnes, 2009a; 2009b; Barnes and Wright, 2012), Tanzania (Kaijage and Tibaijuka, 1996), Vietnam (Davies and Smith, 1998) and Zimbabwe (Mtapuri, 2011).

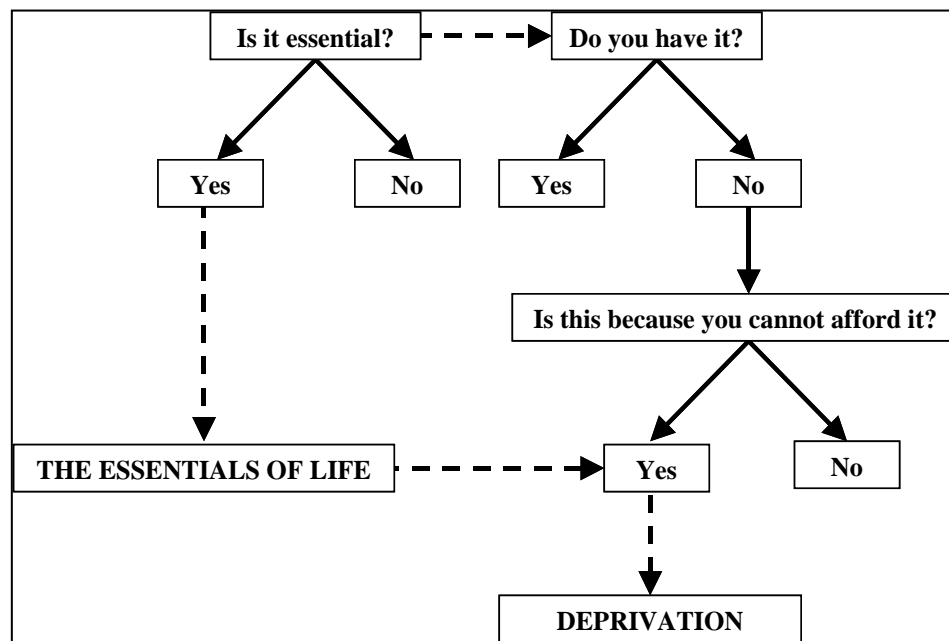
The Consensual Approach for measuring poverty involves three main steps;

1. First, what the public perceives as social necessities must be established;

2. second, those who suffer an enforced lack of the socially perceived necessities are identified; and,
3. third, the levels of household income at which people run a greater risk of not being able to afford the socially-defined necessities in a given national context should be determined, so identifying the poverty line or band (Gordon and Pantazis, 1997; Gordon, 2006).

How these steps are taken differs slightly between studies, and Figure 1 sets out how this has been done in Pacific Island Countries. Saunders and Wong (2011) also successfully used this approach twice in Australia and a third survey is in preparation.

Figure 1: Identifying the Essentials of Life and Deprivation



Source: Saunders and Wong (2011)

Respondents were presented with a list of items and activities, and asked if they considered them to be essential. A follow up question then asked respondents if they had or lacked the item, and if they lacked it was it because they could not afford it or because they did not want it. Only those cases of respondents wanting a socially perceived necessity but not having it because they could not afford it were counted as deprived. The number of enforced lacks were summed together in what becomes a deprivation index.

The Consensual Deprivation survey question module from the Solomon Islands and the relevant section from the enumerator handbook are shown in the appendix.

6. ANALYTICAL FRAMEWORK

The 1999 and 2012 Poverty and Social Exclusion (PSE) projects developed an analytical framework to ensure that the deprivation items which are included in the final index are suitable, valid, reliable and additive.

This methodology has been used to develop robust and comparable measures of deprivation for various poverty surveys (see for example Hillyard et al 2003; Gordon 2010; Fahmy et al 2011). An important aspect of this methodology is that it facilitates the identification and selection of an optimal set of deprivation items from the initial list of available items. To identify the final optimal list of deprivation items four aspects are considered in turn:

1. The *suitability* of each deprivation item, in order to check that majority of respondents in the country (as well as the different population sub-groups within each country) consider them necessary to have an “acceptable” standard of living. Here, “suitability” is understood as a measure of “face validity” amongst the population.

2. The *validity* of individual items, to ensure that each item exhibits statistically significant relative risk ratios with independent variables known to be correlated with deprivation.
3. The *reliability* of the deprivation scale, to assess the internal consistency of the scale as a whole - i.e., how closely related the set of deprivation items are as a group. This analysis is based on the Cronbach's Alpha statistic as well as on the Beta and Lambda coefficients; it is conducted as part of a Classical Test Theory (CTT) framework. This reliability analysis of the deprivation scale as a whole can also be complemented with additional tests on the reliability of each individual item in the scale using Item Response Theory (IRT).
4. The *additivity* of items, to test that the deprivation index components add up – i.e. that someone with a deprivation index score of “2” is suffering from more severe deprivation than someone with a score of “1”. Additivity is checked for the deprivation items that successfully passed the suitability, validity and reliability tests.

The deprivation items that successfully passed these four steps can be considered to be robust candidates for being aggregated into a multidimensional poverty indicator. The resulting measure is a product of the application of a standard scientific approach which is therefore replicable (i.e. two different researchers should produce the same prevalence rates, etc.) and takes account of flaws or pitfalls in the survey data.

This methodology was assessed by the United Nations Expert Group on Poverty Statistics (Rio Group) and included in their Compendium of Best Practice in Poverty Measurement in 2006. More recently the analytical framework has been rigorously assessed by the European Statistical Office (EUROSTAT). The Eurostat Task Force on Material Deprivation in 2011 concluded that “The work is considered technically as providing a “gold standard” for the list of MD variables and indicator's construction and has unanimous support²”. Subsequently, the EU adopted a new official multidimensional measure of Material and Social Deprivation in March 2017 and the EU's first ever measures of Child Deprivation in March 2018 (the relevant technical documents are attached – see appendix).

7. RESULTS FROM THE PACIFIC

The Consensual Deprivation method for poverty measurement is based upon Townsend's (1979) argument that there are certain necessities of life which people need in all societies. For example, there are universal material needs, such as food, water, shelter, clothing, etc. There are also universal social needs – in all societies people have obligations to their parents, children, siblings and friends which they sometimes require resources (such as money) to fulfil. For example, in all societies people cook and eat food together on occasion, they give presents at certain times of year and they mark certain major life events such as births, deaths, marriage, coming of age, etc. These social obligations can be extremely important and in many societies people will sometimes sacrifice their material needs in order to meet their social obligations e.g. poor parents may go hungry so as to be able to honour their children's marriage, etc.

Of course the way that these universal material and social needs are met will vary by culture and society and across time. Nevertheless, we would expect that there would be a high level of agreement in the general populations in any country about what constitute the necessities of life which all people should be able to afford and no one should have to do without. Table 1 shows that there is widespread agreement in Solomon Islands, Tonga and Tuvalu about what household and adult possessions and activities are essential/necessary.

² MD is an abbreviation for Material Deprivation

Table 1. Proportion of the population thinking at item essential. Adult and Household level items

		% Yes it is essential		
		Tonga	Tuvalu	Solomon Islands
Adults	Replace worn out clothes	98	98	93
	A meal with protein weekly	97	99	-
	Money to spend each week on self	96	98	95
	Two meals a day	96	91	94
	Get together	96	98	83
	Clothes for special occasions	95	99	98
	Access to safe public transport	95	95	-
	Fruit and vegetables daily	95	98	-
	Visit friends and family in hospital	94	98	95
	Two pairs of properly fitting shoes	94	99	91
	Presents once a year	93	98	92
Household	Enough money to replace appliances	98	97	78
	Enough money to replace worn out furniture	97	96	90
	Have all prescribed medicines	96	98	95
	Make regular savings	96	96	97
	Having own means of transport	95	97	93

Table 1 shows that over three quarters of the population in all three Pacific Island countries believe that all the material and social deprivation items are essential. Similar, results are shown in Table 2 with regards to the necessities of life for children.

Table 2. Proportion of the population thinking at item essential. Child Items

Item	% Yes: It is essential		
	Tonga	Tuvalu	Solomon Islands
New properly fitting shoes	98	100	92
Three meals a day	98	100	99
Daily meal with protein	98	97	95
Suitable place to study	97	97	97
Enough beds for every child over 10	97	97	99
School uniform and equipment	97	98	98
Some new, not second hand clothes	97	98	93
Fruit and vegetables daily	96	97	-
Celebrations on special occasions	96	96	93
Participate in school trips	95	96	89
Books suitable for their age	94	96	-
Tutorial lessons once a week	93	96	-
Outdoor leisure equipment	93	95	79

Despite the widespread agreement across Solomon Islands, Tonga and Tuvalu about what constitutes the necessities of life there are large difference in the proportion of the population which can afford these necessities i.e. who suffer from a enforced lack of these socially perceived necessities because they cannot afford them rather than because they do not want them. Table 3 shows a heat map of the percent of adults in each country who cannot afford each deprivation item – high rates are shown in red and orange and relatively low rates in yellow and green in the table.

Table 3: Proportion of adults who cannot afford each possession or activity

		% Adults deprived		
		Tonga	Tuvalu	Solomon Islands
Adults	Fruit and vegetables daily	13	14	-
	Visit friends and family in hospital	13	15	51
	Money to spend each week on self	12	15	30
	Get together	12	8	37
	Access to safe public transport	12	14	-
	Replace worn out clothes	11	10	34
	Presents once a year	10	13	42
	Two meals a day	5	3	2
	Clothes for special occasions	4	3	14
	Two pairs of properly fitting shoes	2	7	37
	A meal with protein weekly	1	1	-
Household	Enough money to replace worn out furniture	35	28	61
	Having own means of transport	32	22	61
	Enough money to replace appliances	29	30	60
	Make regular savings	28	28	46
	Have all prescribed medicines	13	15	46

With the exception of being able to afford to eat ‘two meals a day’ there are much higher rates of deprivation in the Solomon Islands than in Tonga or Tuvalu. There are similar levels of deprivation in Tonga and Tuvalu but the pattern of deprivation varies across these two countries.

Table 4 shows the extent and nature of child deprivation in Tonga, Tuvalu and the Solomon Islands. In general children are much more likely to go without the things their parents think they need in the Solomon Islands but in all three countries there are similar rates of older children (over 10) who have to share beds with other children or adults. In both Tonga and the Solomon Islands just under one in ten children does not have three meals a day due to a lack of money, by contrast in Tuvalu virtually no children go to bed hungry. However, the quality of children’s diet is markedly different in Tonga and the Solomon Islands. In Tonga only 5% of children do not have a meal each day with fish, meat, chicken or the vegetarian equivalent (i.e. a meal with protein) whereas in Solomon Islands 43% of children do not get a protein rich meal every day.

In Tuvalu one in five school age children and in Solomon Islands almost two in five children have no place to study or do homework, whereas in Tonga this deprivation affects less than one in ten children.

Table 4. Child deprivation in Tonga, Tuvalu and Solomon Islands

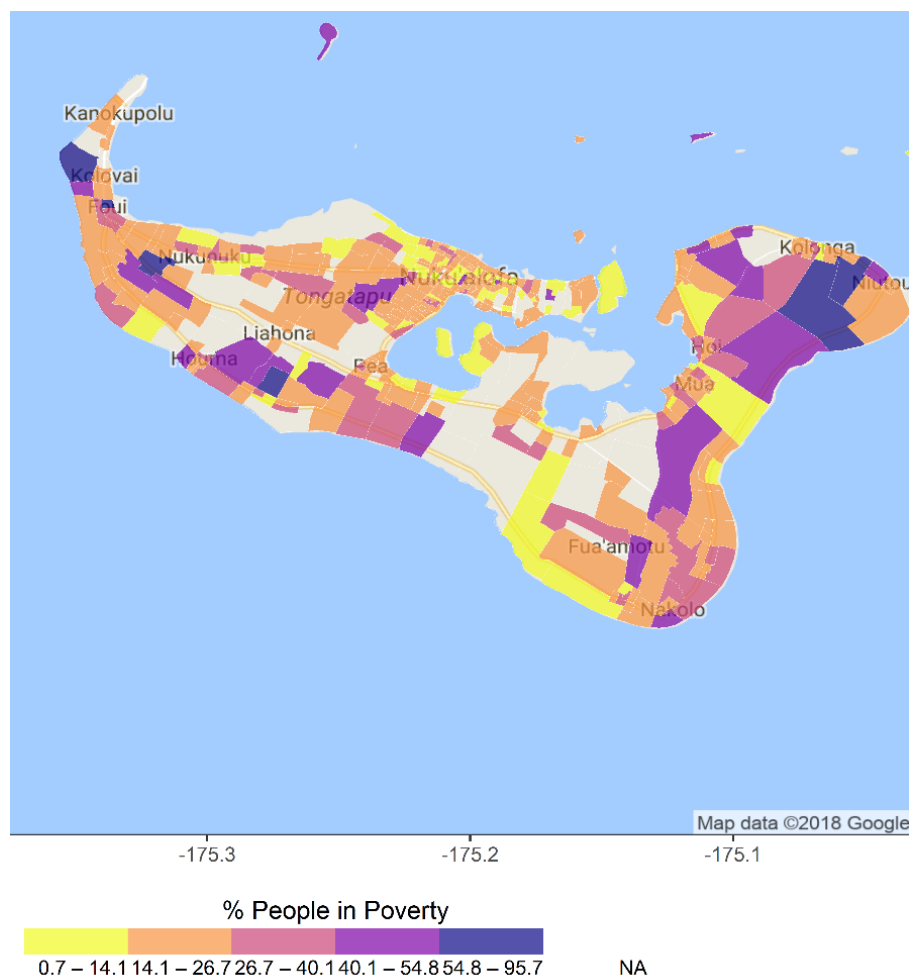
		% Children deprived		
		Tonga	Tuvalu	Solomon Islands
Outdoor leisure equipment		23	17	51
Tutorial lessons once a week		22	16	-
Books suitable for their age		22	18	-
Fruit and vegetables daily		13	13	-
Celebrations on special occasions		13	7	27
Some new, not second hand clothes		11	9	31
Participate in school trips		10	7	37
Suitable place to study		9	20	31
Enough beds for every child over 10		9	13	17
Three meals a day		8	0	9
Daily meal with protein		5	7	43
School uniform and equipment		4	5	20
New properly fitting shoes		3	7	44

Deprivation items that are shown to be suitable, valid, reliable and additive can be summed into a multidimensional deprivation index which can be combined with a low income measure to produce a multidimensional poverty measure which is highly diagnostic and policy relevant. This kind of poverty measure can be used to identify and target the population groups which have the greatest needs. Where Census data are also available these can be combined with the survey data to produce small area estimation models to identify (and target) the poorest areas.

The preliminary results from such an EBLUP modelling exercise for Tongatapu, Kingdom of Tonga are shown in Figure 1. The validity of these area poverty estimates has been verified with local authorities and by interviews with some household members in the worst affected areas in some parts of the island.

These kinds of maps can also be useful for targeting the most vulnerable households when recovering from a natural disaster, such as Typhoon Gita.

Map 1. Poverty rate. Consensual method. Block-level estimates. Tongatapu. 2016.



8. WHAT STILL NEEDS TO BE DONE?

The Pacific Island Countries and Territories (PICTS) are highly diverse and the best set of deprivation questions to include in a social survey will inevitably vary from country to country. It would be unwise to just take an off the shelf set of deprivation questions from Europe, New Zealand or Tuvalu and include it in another countries survey. Given the universal nature of human material and social needs such an 'off-the-shelf' set of questions may of course yield reasonable results but there are likely to be better questions which are more suitable for the cultural context. Selecting the best set of deprivation questions to use is normally done in a series of steps:

1. A sub-set of questions is selected by the National Statistical Office and experts on poverty in the country.

2. Focus groups with members of the general public are conducted to ascertain their views about the necessities of life and to check the views of the 'experts'.
3. The deprivation question module is piloted in the usual manner and if needed, cognitive interviews can be conducted to illuminate in more detail what respondents are thinking when they answer the Consensual Deprivation questions.

Many Statistical Offices have selected deprivation questions and wordings from amongst the large number of such questions which have been used in over fifty countries over the past 30 years (see appendix).

APPENDIX

SOLOMON ISLANDS DHS/MICS 2015 QUESTIONNAIRE (Extract)

HOUSEHOLD HARSHIP				
141	THE FOLLOWING QUESTIONS WILL BE USED TO MEASURE FAMILY/HOUSEHOLD MATERIAL WELL-BEING OR HARSHIP ASK THE HEAD OF THE HOUSEHOLD OR ANY ADULT MEMBER OF THE HOUSEHOLD			
		Is it essential for everyone? <i>Hem important fo evriwan?</i>	Do you have it? <i>Waswe iu garem?</i>	Is it because you cannot (CA) afford it? OR Is it because you don't want it (DW)
142	Enough money to replace any worn out furniture (NAME) have?	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
143	goods such as refrigerator or washing machine?	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
144	Regular savings for emergencies?	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
145	All medicine prescribed by your doctor, when you are sick?	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
146	Having your own means of transportation (car, boat, motorcycle, etc.)	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
147	Which one of the following statements best describes how well your household has been keeping up with bills and credit commitments in the last 12 months?	KEEPING UP WITH BILLS WITHOUT ANY DIFFICULTIES 1 BUT IT IS A STRUGGLE FROM TIME TO TIME 2 BUT IT IS A CONSTANT STRUGGLE 3 HAVE FALLEN BEHIND WITH SOME OF THEM 4 HAVE FALLEN BEHIND WITH MANY OF THEM 5		
148	Generally, how would you rate your standard of living?	WELL ABOVE AVERAGE 1 ABOVE AVERAGE 2 AVERAGE 3 BELOW AVERAGE 4 WELL BELOW AVERAGE 5		

HARDSHIPS FOR CHILDREN AGED 1-14 YEARS				
150	<p>CHECK COLUMN 11b FOR CHILDREN AGED 1-14 IN THE HOUSEHOLD SCHEDULE</p> <p>IF THERE IS ONE OR MORE CHILDREN IN THE HOUSEHOLD, MARK THE FIRST BOX AND ASK THE FOLLOWING QUESTIONS</p> <p>IF NO CHILDREN AGED 1-14, MARK THE SECOND BOX THEN GO TO QUESTION 162</p> <p>NOTE THAT THE HEAD OF THE HOUSEHOLD OR SPOUSE OR ANY ADULT SHOULD ANSWER ALL QUESTIONS ABOUT ALL CHILDREN IN THIS HOUSEHOLD.</p>			
151	<p>CHECK COLUMN 11b:</p> <p>ONE OR MORE CHILDREN AGED 1-14 <input type="checkbox"/></p> <p>NO CHILDREN AGED 1-14 <input type="checkbox"/></p>			162
		Is it essential for everyone?	Do you have it?	Is it because you cannot afford it? OR Is it because you don't want it
152	New properly fitting, shoes	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
153	Three meals a day	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
154	Some new, not second-hand clothes	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
155	Celebrations on special occasions such as birthdays, Christmas or religious festival?	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
156	One meal with meat, chicken, fish or vegetarian equivalent daily	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
157	All school uniform and equipment required (eg. Books, pen, etc)	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
158	Enough beds and bedding for every child in the household	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
159	To participate in school trips and school events that costs money	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
160	Bicycle	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2
161	A suitable place to study or do homework	YES..... 1 NO 2	Y N 1 2 → ↓	Can't afford..... 1 Don't want..... 2

THE ADVANTAGES OF THE CONSENSUAL APPROACH TO POVERTY MEASUREMENT

25 Mai 2018 – p. 12/46

HARDSHIPS FOR ADULTS AGED 15 YEARS AND OVER										
162	CHECK COLUMN 11d AND COLUMN 2 FOR ADULT ELIGIBILITY AND NAME IN THE HOUSEHOLD SCHEDULE RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE ADULTS AGED 15 AND OVER TO BE ASKED THE FOLLOWING QUESTIONS IF MORE THAN SIX ADULTS IN THIS HOUSEHOLD, USE CONTINUATION QUESTIONNAIRE									
163	CHECK COLUMN 11d: ONE OR MORE ADULTS AGED 15 AND OVER <input type="checkbox"/> NO <input type="checkbox"/> ADULTS AGED 15 AND OVER									201
		ADULT 1			ADULT 2			ADULT 3		
164	LINE NUMBER FROM COLUMN 11d	LINE NUMBER			LINE NUMBER			LINE NUMBER		
	NAME FROM COLUMN 2	NAME			NAME			NAME		
		Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)	Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)	Is it essential for everyone?	Do you have it?have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)
165	Two pairs of properly fitting shoes, including a pair of all- weather shoes	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
166	Two meals a day	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
167	A small amount of money to spend each week on yourself	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
168	Clothes to wear for social or family occasions such as parties or special church occasions?	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
169	Replace worn-out clothes by some new (not second-hand) ones	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
170	To get together with friends/ family for a drink/meal at least monthly	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
171	Presents for friends or family once a year	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
172	Enough money to be able to visit friends and family in hospital or other institutions	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 ↓	CA..... 1 DW..... 2
		(GO TO 165 FOR NEXT ADULT OR, IF NO MORE, GO TO 201)			(GO TO 165 FOR NEXT ADULT OR, IF NO MORE, GO TO 201)			(GO TO 165 FOR NEXT ADULT OR, IF NO MORE, GO TO 201)		

		ADULT 4			ADULT 5			ADULT 6		
164	LINE NUMBER FROM COLUMN 11d NAME FROM COLUMN 2	LINE NUMBER			LINE NUMBER			LINE NUMBER		
		Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)?	Is it essential for everyone?	Do you have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)?	Is it essential for everyone?	Do you have it?have it?	Is it because you cannot (CA) afford it OR is it because you don't want it (DW)?
165	Two pairs of properly fitting shoes, including a pair of all-weather shoes	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
166	Two meals a day	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
167	A small amount of money to spend each week on yourself	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
168	Clothes to wear for social or family occasions such as parties or special church occasions?	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
169	Replace worn-out clothes by some new (not second-hand) ones	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
170	To get together with friends/family for a drink/meal at least monthly	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
171	Presents for friends or family once a year	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
172	Enough money to be able to visit friends and family in hospital or other institutions	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2	YES.....1 NO.....2	Y N 1 2 → ↓	CA..... 1 DW..... 2
		(GO TO 165 FOR NEXT ADULT OR, IF NO MORE, GO TO 201)			(GO TO 165 FOR NEXT ADULT OR, IF NO MORE, GO TO 201)			(GO TO 165 FOR NEXT ADULT OR, IF NO MORE, GO TO 201)		

SOLOMON ISLANDS DHS/MICS 2015 Interviewers Manual (extract)

1.1.1 POVERTY/DEPRIVATION MODULE

This section looks at a range of items and activities that can be associated with standard of living. Hardship is defined by the respondents’:

- inability to afford items that most people think all families ought to have;
- their other ‘unmet needs’ ; and
- whether they are managing their money and staying clear of problem debts – that is debts they cannot repay and are falling behind with the repayments

These questions will be used to gain a better understanding of people's living standards and the spending choices that they make. None of these items on their own is an entirely adequate measure, but taken together they add up to a very sensitive and reliable measure of family material well – being or hardship.

The series of questions which determine hardship are either factual or opinion based.

For them to effectively determine hardship and deprivation the answers *must* reflect the *respondent's interpretation* of the question. Do not attempt to guide or re-phrase the question. If the respondent does not understand what is being asked (for instance they are unclear about what we mean by 'all weather shoes'), simply repeat the question and ask them to answer it to the best of their ability. Please do not give your translation of a phrase or question.

1.1.1.1 HOUSEHOLD HARDSHIP/DEPRIVATION Qs 142 – 148 (respondents will think about all the household members)

In this section, you will be asking a few questions about things you and your family can afford to do. These questions generally refer to whether individual/families have the ‘means’ and not necessarily access to these items/activities. They are household questions and they are to be asked of the head of household. Parents can be allowed to answer together these questions if they wish.

Q. 142: REPLACING WORN-OUT FURNITURE

First ask, *“Do you (and your family/and your partner) have enough money to replace any worn out furniture?”* The term “furniture” corresponds to the objects such as tables, chairs, beds, desks, dressers, cupboards, etc. kept in the dwelling to make it suitable or comfortable for living or working in. You don’t need to record the answer to this question but based on the respondent’s answer, you follow up and ask the following questions; *“Is it essential for everyone?”* Record the answer and then ask, *“Do you have it?”*. Record the answer and follow the skip correctly.

Q. 143: PURCHASING HOUSEHOLD GOODS AND ITEMS

Ask, *“Do you (and your family/and your partner) have enough money to purchase goods such as refrigerator or washing machine?”*. Follow the same procedure as in Q.143.

Q. 144: MAKING REGULAR SAVINGS FOR EMERGENCIES

Simply ask, *“Do you (and your family/and your partner) make regular savings (e.g. of SI\$1000 a fortnight/month) for emergencies?”* Again, based on the respondent’s answer, follow the same procedure as with the previous questions and ask the following questions, ‘Is it essential....Do you....’) Record the right answer and follow the skip correctly.

Q. 145: ALL MEDICINE PRESCRIBED BY YOUR DOCTOR, WHEN YOU GET SICK

Again start by asking, *“Do you (and your family/and your partner) have all medicine prescribed by your doctor, when you get sick?”* Again, based on the respondent’s answer, follow the same procedure as with the previous questions and ask the following questions, ‘Is it essential....Do you....’) Record the right answer and follow the skip correctly.

Q. 146: HAVING YOUR OWN MEANS OF TRANSPORTATION (car, boat, motorcycle, etc)

Start the interview by asking politely, *“Do you (and your family/and your partner) have your own means of transportation such as car, boat, motorcycle, etc?”* Again, based on the respondent’s answer, follow the same procedure as with the previous questions and ask the following questions, *‘Is it essential....Do you....)’* Record the right answer and follow the skip correctly.

Q. 147: KEEPING UP WITH BILLS

This questions is trying to determine the difficulty with the household in keeping up with paying the bills and credits commitments in the last 12 months. The term “bills’ refers to any bills such as electric bills, phone bills, etc, including other bills commitment that the household need to settle for the families living. Credit commitments refer to any credit made from any source by the family or the household for the living support of the family. You should circle one answer only.

Q. 147: STANDARD OF LIVING

The standard of living can be described or measured by the level of wealth, comfort, material goods and necessities available in the family. However, when asking this question make sure to let the respondents provide the answer based on her/his own interpretation.

1.1.1.2 CHILD DEPRIVATION (ALL CHILDREN AGE 1-14 years) Qs 151 – 161

The next questions are asked about all the children living in this household. It is preferable that these questions are asked to the ‘responsible person’ in the household. If the ‘responsible person’ is NOT available, then an adult who knows and looks after most of the children in the household can answer the questions. Please think about (Names of all children in the household) when answering these questions.

‘Responsible person’ refers to an adult who is mainly responsible for daily operation of the family such as shopping, cooking, washing etc.

Respondents are asked to think of all children living in the household when answering these questions. Cases may arise, however, where one child ‘has’ and one cannot afford or one ‘doesn’t want’ and one cannot afford. In these cases priority coding is necessary.

The priority will ALWAYS be cannot afford, therefore in the above two examples, ‘cannot afford’ should have been coded. Following this, if one child ‘has’ and one ‘doesn’t want’ interviewers should code ‘doesn’t want’. Therefore, the priority order is:

The variable holds for the whole group of children aged under 15 and above 1.

Even if only one child does not have the item, the whole group of children in the household are assumed not to have the item. Even if only one child does not have the item because the household cannot afford it, then the answer category should be “No, because the household cannot afford it”.

If there is/are child/children under 1 year, only the other child/children of the household should be taken into account.

Note that any ‘dependent children’ in the household should be included. Dependent children refers to those children who live and depend their livelihood on what is being provided by that particular household but they are NOT biological nor adopted children of the respondents.

Q. 151: FILTERING INSTRUCTION FOR CHILDREN AGED 1-14

Be very careful in following the instruction, check column 11b and tick the appropriate box.

Q. 152: TWO PAIRS OF PROPERLY FITTING SHOES

Similarly, you should start by asking politely, *“Does your child have/do your children have) two pairs of properly fitting shoes, including a pair of all weather shoes?”* You are not to record the answer to this question on the questionnaire. However, based on the answer, ask the respondent the next question, *“Is it essential for everyone?”* This question is asking whether it is necessary or it is not necessary for all children in this household to have two pairs of proper fitting shoes. Record the answer and then ask the last question, *“Do you have it?”* Record again the answer and ask politely the next question, *“Is it because you*

cannot afford it? OR Is it because you don't want it? When asking these questions, please remind the respondent to think of all children (including their own children, adopted children and any dependent children) living in the household.

Q. 153: THREE MEALS A DAY

All children of the household don't have to eat their three meals at the same time; they don't have to share the same food. The three meals can be eaten at different time and/or place. Three meals a day should be understood as the breakfast, the lunch and the dinner. The meal does not need to be cooked necessarily.

First ask, “ (Does your child have/do your children have) at least three meals a day? Use the proper wording in the question. Use the same approach as in the previous question to continue with the next questions about the child/children meals. Record the right answer and follow the skip properly.

Q. 154: SOME NEW (NOT SECOND-HAND) CLOTHES

The focus is on the affordability for the child to have some new clothes. Not all clothes must be new, some can be second-hand. This is particularly the case for young children. The variable refers to worn out clothes, not to old-fashioned ones.

Follow the same procedure as with the above questions and start by asking, “(Does your child have/do your children have) *some new not second hand clothes*? Please, follow up with the other two other questions of, “*Is it essential...?*”, “*Do you have ...?*” and “*Is it because you cannot afford it? OR Is it because you don't want it?*” Record the answers accordingly.

Q. 155: CELEBRATIONS ON SPECIAL OCCASIONS (Birthdays, etc)

Follow the same procedure as with the above questions and start by asking, “(Does your child have/do your children have) *celebrations on special occasions such as birthdays, Christmas or other religious festivals*? Please, follow up with the other three other questions of, “*Is it essential...?*”, “*Do you have ...?*” and “*Is it because you?*” Record the answers accordingly.

Q. 156: ONE MEAL WITH MEAT, CHICKEN OR FISH (OR VEGETARIAN EQUIVALENT) AT LEAST ONCE A DAY

All children of the household don't have to eat meat, chicken or fish at the same time; they don't have to share the same food. The meat, chicken or fish can be eaten at different time and/or place.

Follow the same procedure as with the above questions and start by asking, “(Does your child have/do your children have) *one meal with meat, chicken or fish or vegetarian equivalent at least once a day*? Please, follow up with the other two other questions of, “*Is it essential...?*”, “*Do you have ...?*” and “*Is it because you?*” Record the answers accordingly.

Q. 157: ALL SCHOOL UNIFORM OF CORRECT SIZE AND EQUIPMENT REQUIRED (eg.

Books, pens, etc)

All children of the household have not only the school uniform but also of the correct size. Also the school books and pens are what the children are used in their respective class or level.

Start by asking the respondent, *(Does your child have/do your children have.) have all school uniform and equipment required such as books, pens, etc.*? Again, follow the same steps as described in the previous questions and record the answers and follow the skips correctly.

Q. 158: ENOUGH BEDS AND BEDDING FOR EVERY CHILD IN THE HOUSEHOLD

Every child is expected to have bed of his/her own despite their age except infant who are still sleeping with their mother in bed. If one child does not have a bed and bedding then he/she is considered to be deprived in this indicator. Sharing a bed is allowed only if it's a double bed for only two children.

Again begin with asking the respondent, (Does your child have/do your children have) enough beds and bedding each for every child in this household? Follow the same instructions as given in the above question. Make sure to record the right answer according to the respondent interpretation.

Q. 159: PARTICIPATE IN SCHOOL TRIPS AND SCHOOL EVENTS THAT COST MONEY

School trips and events refer to only activities organised by school in which the child or children should be participating or involved.

Q. 160: BICYCLE

Follow the same procedure as with the above questions and start by asking, *“(Does your child have/do your children have) a bicycle? Please, follow up with the other questions of, “Is it essential...?”, “Do you have ...?” and “Is it because you?” Record the answers accordingly.*

Q. 161: SUITABLE PLACE TO STUDY OR DO HOMEWORK

A suitable place to study or do homework means a silent place with enough room and light. The place is to be at home and not elsewhere, e.g in a library.

Follow the same procedure as with the above questions and start by asking, *“(Does your child have/do your children have) a suitable place to study or do homework? Please, follow up with the other two other questions of, “Is it essential...?”, “Do you have ...?” and “Is it because you?” Record the answers accordingly.*

1.1.1.2.1 ADULT DEPRIVATION (ALL ADULT AGE 15 years and older) Qs 162 – 172

The following questions should be asked of all adult aged 15 years and older residing in the households at the time of the interview. The procedure in administering the questions is very similar to those asked of the children but this time the attention is more on the adult and that each adult member of the household should be asked these questions separately. If there are more than 6 adult members (15 years and older), you will need to use the Household continuation questionnaire. Start with the first person and ask all the questions all down to question 172, then go back to continue with the next member.

Q. 163 FILTERING INSTRUCTION

Check column 11d in the Household schedule for adults aged 15 years and older. Mark the first box if there are adult staying in the household and record the line number and name in Q. 163. If no adult in the household, mark the second box and skip to Q.301.

Q. 164 LINE NUMBER AND NAME – should all be obtained from the household schedule in column 11d and column 2.

Check column 11d in the Household schedule for adults aged 15 years and older. Mark the first box if there are adult staying in the household and record.

Q. 165: TWO PAIRS OF PROPERLY FITTING SHOES

The concept of shoes has to be understood in a broad sense. It could include boots, sandals, etc. according to the climatic conditions of the concerned country. On the other hand, all-weather shoes could be defined as any daily life shoes with the exception of sandals and boots.

Similarly, you should start by asking politely, *“Do you have two pairs of properly fitting shoes, including a pair of all weather shoes? You are not to record the answer to this question on the questionnaire. However, based on the answer, ask the respondent the next question, “Is it essential for everyone? This question is asking whether it is necessary or it is not necessary for all adults in this household to have two pairs of proper fitting shoes. Record the answer and then ask the next question, “Do you have it?” Record again the answer and ask politely the last question, “Is it because you cannot afford it? OR Is it because you don’t want it? Make sure to record the answers for each questions correctly.*

Q. 166: TWO MEALS A DAY

All adults aged 15 and over are being asked these questions. Begin with, *“Do you have at least two meals a day?” Again you are not to record the answer to this question but follow up with asking the followings, “Is it essential for everyone?”, “Do you have it?” and “Is it because you cannot afford it OR is it because you don’t want it?” circle one answer for each of the three questions.*

Q. 167: SPEND A SMALL AMOUNT OF MONEY EACH WEEK ON YOURSELF

To spend a small amount of money on yourself means to freely spend money. e.g. To go to the movies, to buy a gift for a friend, to go to the hairdresser, etc. The "Yes" answer means that the person can afford to spend this money without having to consult anyone. The variable aims to capture indirectly the effects of the intra-familial income distribution.

Again begin with the question, *"Do you have a small amount of money to spend each week on yourself (not on your family)?"* Again you are not to record the answer to this question but follow up with asking the followings, *"Is it essential for everyone?"*, *"Do you have it?"* and *"Is it because you cannot afford it OR is it because you don't want it?"* Circle one answer for each of the three questions in the spaces provided.

Q. 168: CLOTHES TO WEAR FOR SOCIAL OR FAMILY OCCASIONS SUCH AS PARTIES OR SPECIAL CHURCH OCCASIONS.

Clothes include traditional wears that goes along with specific functions. For example, in the Solomon society, there are traditional wears that should be worn at different occasions. Again begin with asking, *"Do you have ...READ... clothes to wear for social or family occasions such as parties or special church occasions?"* Follow the same procedures as described in the above question and record each answer accordingly.

Q. 169: REPLACE WORN-OUT CLOTHES BY SOME NEW (NOT SECOND-HAND)ONES – BASIC NEEDS

The focus is on the replacement of the worn out clothes by some new clothes. Not all clothes must be new, some can be second-hand. The variable refers to worn out clothes, not to old-fashioned ones.

Similar with other previous questions above, begin with *"Do you replace any worn-out clothes by some new, not second-hand ones?"* Again you are not to record the answer to this question but follow up with asking the followings, *"Is it essential for everyone?"*, *"Do you have it?"* and *"Is it because you cannot afford it OR is it because you don't want it?"* Circle one answer for each of the three questions in the spaces provided.

Q. 170: TO GET-TOGETHER WITH FRIENDS/FAMILY (RELATIVES) FOR A DRINK/MEAL

AT LEAST ONCE A MONTH

The friends are people the respondent gets together with in his/her spare time (i.e. after working hours, at weekends, or for holidays) and with whom the respondent shares private matters.

The family, or relatives, shall be understood in the widest sense, and shall include father/mother/children, siblings, grandparents, aunts, uncles, cousins, nephews, nieces and families-in-law.

To get-together for a drink/meal means spending time eating and/or drinking with friends or family (relatives) at home or elsewhere (restaurant, pub, kava party etc.).

Make sure to begin the question by asking, *"Do you get together with friends or family around for a drink or meal at least once a month?"* Simply follow the same procedures and ask the three next questions related to the respondent's getting together with friends and family. Record the answer correctly.

Q. 171: PRESENTS FOR FRIENDS OR FAMILIES ONCE A YEAR

Ask the respondent, *"Do you have presents for friends or families once a year? E.g. for birthdays/weddings etc."* Follow the same procedures as described in the above question and record each answer accordingly.

Q. 172: ENOUGH MONEY TO BE ABLE TO VISIT FRIENDS AND FAMILY IN HOSPITAL OR

OTHER INSTITUTIONS (including those from overseas and outer islands)

Visiting relatives and friends are parts of the responsibilities of our society. In particular, in the Solomon islands society perform different roles depending on how they related to each other. These obligations are costly these days and this question focus on whether each adult are fulfilling his/her relational function to either his relatives or friends. Normally visiting someone means that food must be accompanied even with other traditional possessions of food, mats, oils and other necessary possession which are very costly these days.

Start by asking politely, “Do you have enough money to be able to visit friends and family in hospital or other institutions, including those from overseas and outer islands?” In the same way, complete the question by following the same procedures as been described earlier.

Annex 1
to SPC/ISG/2017/5/4

The new EU indicator of material and social deprivation

Technical note

1. Composition of the set of deprivation items

The new indicator of *material and social* deprivation replaces the standard *material* deprivation indicator which the EU adopted in 2009.

The 2009 indicator was defined as the proportion of people living in households confronted with at least three out of nine deprivations. These deprivations are the inability for a household to:

1. face unexpected expenses;
2. afford one week annual holiday away from home;
3. avoid arrears (in mortgage rent, utility bills and/or hire purchase instalments);
4. afford a meal with meat, chicken, fish or vegetarian equivalent every second day;
5. afford keeping their home adequately warm;
6. have access to a car/van for personal use;
7. afford a washing machine;
8. afford a colour TV; and
9. afford a telephone.

The new deprivation indicator is based on 13 items whose selection results from a systematic item by item robustness analysis (see Guio, Gordon and Marlier, 2012 and Guio, Gordon, Pomati, Najera, 2017)³.

Since 2014, these items are collected annually in each country. Seven deprivation items relate to the person's household and six to the person themselves. The seven household deprivations consist of six items already included in the 2009 indicator (items 1-6) and one new item – i.e., the inability for the household to:

1. face unexpected expenses;
2. afford one week annual holiday away from home;
3. avoid arrears (in mortgage, rent, utility bills and/or hire purchase instalments);
4. afford a meal with meat, chicken or fish or vegetarian equivalent every second day;
5. afford keeping their home adequately warm;
6. have access to a car/van for personal use; and
7. replace worn-out furniture.

The six personal deprivations are the inability for the person to:

1. replace worn-out clothes with some new ones;
2. have two pairs of properly fitting shoes;
3. spend a small amount of money each week on him/herself ("pocket money");
4. have regular leisure activities;
5. get together with friends/family for a drink/meal at least once a month; and
6. have an internet connection.

³ Guio, A.-C., Gordon, D. and Marlier, E. (2012), "Measuring material deprivation in the EU: Indicators for the whole population and child-specific indicators", Eurostat Methodologies and working papers, Publications office of the European Union, Luxembourg.

Guio, A.-C., Gordon, D., Najera, H. and Pomati, M. (2017), "Revising the EU material deprivation variables (analysis of the final 2014 EU-SILC data)", Final report of the Eurostat Grant "Action Plan for EU-SILC improvements".

The six personal items are collected at the “adult” level, i.e. for all persons aged 16 or over. They allow making the new indicator gender and age sensitive for adults living in the same household.

2. Name and use of the indicator

Compared with the standard 9-item indicator of *material* deprivation adopted in 2009, the new deprivation indicator also includes items related to social activities (leisure, internet, get together with friends/family, pocket money). It is therefore a measure of “*material and social* deprivation” (or in short “deprivation”), whose composition is different from that of the “*severe material* deprivation” (based on the 9-item list) used in the Europe 2020 Social Inclusion target. In order to avoid confusion, the indicator used in the Europe 2020 target should always be referred to as “*severe material* deprivation” (or, if space allows: “(9-item) **severe** material deprivation”); whereas the new indicator should be referred to as “deprivation” (or, if space allows: “(13-item) material and social deprivation”).

3. Construction of the indicator

The construction of this indicator necessitates the following steps:

3.1 Definition of items: focus on enforced lack

The deprivation items are based on an “enforced lack concept”, i.e. the person/ household lacks the item for financial reasons, not by choice. They are collected in three different ways, depending on the item:

- Using a yes/no formulation: “Can you afford...”:
 - keeping the home adequately warm (HH050);
 - going on holidays (HS040);
 - facing unexpected expenses (HS060);
 - having a meal with proteins every second day (HS050).
- Using a three-answer categories question: “Can you tell me if...”:
 - you have the item;
 - you do not have the item because you cannot afford it;
 - you do not have the item for any other reason.

This three-answer option is used for all six personal items (PD020, PD030, PD050, PD060, PD070, PD080) and for two household items (furniture (HD080) and car (HS110)). Only people lacking an item for the affordability reason (second modality) are considered as deprived of this item. Those lacking the item for any other reason are considered as not deprived of this item.

- Finally, the item related to arrears is based on the combination of three questions, using a yes/no formulation: a) do you have arrears on mortgage or rent payments (HS011); b) on utility bills (HS012); and c) on hire purchase instalments or other loan payments (HS013). Households confronted with at least one of these arrears are “deprived” for this item.

3.2 Unweighted count of items

The new indicator is based on the unweighted sum of the 13 items for each person. The scale ranges from 0 (no deprivation) to 13 (enforced lack of all items). The reliability of the scale is very high both at the EU level and in each Member State: the Cronbach’s alpha statistic, which measures the internal consistency of a scale (see Nunally, 1978⁴), is 0.85 for the pooled EU dataset and ranges from 0.76 in Finland to 0.89 in Bulgaria (the usual minimal threshold is 0.70). The alpha is (much) higher than for the current indicator in all countries. The reason why the indicator uses a simple sum of deprivations rather than a weighted sum is as follows (Guio et al 2012, p. 110): “*Classical Test Theory assumes that there are an infinite (or very*

⁴ Nunally, J. C. (1978), *Psychometric theory* (2nd ed.), McGraw-Hill, New York.

large) number of material deprivation measures. If we could have answers to this infinite number of deprivation questions then we would have 'perfect knowledge' (we would know everything) about each person's deprivation. No set of weights could add any additional information as we would already know everything i.e. the infinite deprivation index is self-weighting. The square root of the Cronbach's alpha statistic can be considered to be the correlation between the indicator and the 'perfect' index made from the answers to the infinite set of deprivation questions. The Cronbach's alpha for the new indicator is 0.85. The correlation with the perfect infinite set of deprivation indicators is therefore impressive (0.92), so there is little additional information that any differential weights could add. Even if perfect error free differential weights could be developed the results from the current deprivation indicator and the weighted indicator would be essentially identical. In view of these results and because of the advantages of the unweighted approach (in particular, its simplicity and transparency), an equal weighting approach seems to be well suited for the construction of EU material deprivation indicators."

3.3 Selected-respondent countries

In most but not all register countries, the six personal items are only collected for one adult in the household, i.e. the selected respondent. The sample of selected respondents is representative of the "adult" population (people aged 16 or over) in these countries; specific weights should therefore normally be used to take into account the fact that only one adult member is surveyed. Instead, in order to ensure consistency with other household items, the information collected from the selected respondent is distributed to other household members and personal weights are used for the whole population (RB050), as in other (non-selected respondent) countries. By definition, in selected respondent countries, the deprivation indicator does not differ within the household (by gender, age etc.). So, the analysis of intra-household sharing of deprivation among adults of a same household cannot be performed.

3.4 From the deprivation count to the deprivation rate

On the basis of the deprivations count (ranging from 0 to 13), the deprivation rate is defined as the weighted proportion of people lacking at least five items in the whole population. The weight used is the personal weight RB050.

The choice of the threshold is data-driven. At EU level, this threshold results in a proportion of people deprived that is close to that of the 2009 standard material deprivation indicator (3+ deprivations out of 9).

3.5 The specific case of children

Seven out of the 13 deprivation items included in the new indicator are collected at the household level and are thus assumed to apply equally to all household members. The remaining six items are collected at the individual level: they are collected only for people aged 16 or over and have therefore to be "distributed" to children below 16. The rule applied for this distribution is the following: "if at least half the number of adults for which the information is available in the household lack an item, then the children living in that household are considered as deprived from that item".

The same set of 13 items and the same threshold (5+) is used for both children and adults. However, when computing child deprivation, a lower weight is given to adult items, in order to avoid making the indicator of children too sensitive to adult deprivations. Among the 5+ deprivations required to be considered as deprived, there needs to be at least three household deprivations (out of the seven household deprivations included in the list).

When the 13-item indicator is broken down for children, it provides information on the proportion of children living in a "deprivation context". It should be clearly mentioned that these children *live in (socially and materially) deprived households*.

A child-specific deprivation indicator is currently being developed at the EU level. It will be based on items addressing the specific living conditions of children (items collected in an EU-SILC ad-hoc module), which may differ from those of their parents/households.

The new EU indicator of Child Deprivation

Draft Technical Note

Indicators of child deprivation

In March 2018, two indicators of child deprivation were agreed at the EU level and will be included in the portfolio of social indicators. The first indicator is a child deprivation rate, the second indicator is an indicator of child deprivation intensity.

The adoption of these child-specific indicators is an important step in the direction of the European Commission's and Member States' commitment to including (at least) one indicator on "child well-being" in the EU portfolio of social indicators and to improving the EU toolbox needed for monitoring progress in the implementation of the EU Recommendation on "Investing in Children: breaking the cycle of disadvantage" endorsed by all EU countries in 2013.

Using this proposed indicator usefully complements the picture provided by other household-centred indicators of poverty and social exclusion that may not adequately reflect the specific situation of children.

Definition:

The child deprivation rate is the percentage of children aged between 1 and 15 years who suffer from the enforced lack of at least three items out of the list of 17 (unweighted) retained items:

1. Child: Some new clothes
2. Child: Two pairs of shoes
3. Child: Fresh fruits & vegetables daily
4. Child: Meat, chicken, fish daily
5. Child: Suitable books
6. Child: Outdoor leisure equipment
7. Child: Indoor games
8. Child: Leisure activities
9. Child: Celebrations
10. 1Child: Invite friends
11. 1Child: School trips
12. Child: Holiday
13. Household: Replace worn-out furniture
14. Household: Arrears
15. Adults in the household: Internet
16. Household: Home adequately warm
17. Household: Car

The child deprivation intensity is the average number of enforced lacks among children deprived, i.e. among children lacking at least three items out of the list of 17 (unweighted) retained items.

Policy relevance

The fight against child poverty and social exclusion and the importance of investing in children's well-being has been high on the EU policy agenda for more than a decade. A first significant step was the independent report on *Taking forward the EU Social Inclusion Process*, commissioned by the EU Luxembourg Presidency in the first half of 2005, subsequently updated and published as Marlier et al (2007). This report stressed the need for "children mainstreaming" and suggested a specific approach to child well-being at EU level. It also argued that simple age group breakdowns of EU social indicators were insufficient to adequately capture the multi-dimensional nature of poverty and social exclusion of children – child-specific measures are needed. Following this recommendation, the SPC decided to reserve a slot for (at least) one indicator on "child well-being" in the EU portfolio of social protection and social inclusion indicators⁵ and to set up an *EU Task-Force on Child Poverty and Child Well-Being*. The report of this Task-Force and its 15 recommendations were endorsed by the European Commission and all EU countries in 2008 (Social Protection Committee 2008). Another step forward was taken in February 2013, when the European Commission published a Recommendation on "Investing in children, breaking the cycle of disadvantage", which was also endorsed by all EU Member States a few months later (European Commission 2013; see also Frazer and Marlier 2014 and 2017). The Commission's Recommendation builds on research commissioned by three EU Presidencies that took place between 2010 and 2012⁶, as well as research (commissioned) by the SPC and/or the European Commission (Belgian Presidency of the European Union 2010; Frazer, Marlier and Nicaise 2010; TáRKi and Applica 2010; TáRKi 2011; Frazer and Marlier 2012; SPC 2012).

The 2013 EU Recommendation calls on Member States to "(reinforce) statistical capacity where needed and feasible, particularly concerning child deprivation (MD)"⁷. The 2009 ad-hoc EU-SILC module included such information. In the first in-depth analysis of the 2009 EU-SILC data on deprivation carried out by Guio et al in 2012, an optimal set of children's MD items was identified and a child MD index was recommended for use by EU Member States and the European Commission. These child MD items were then included again in the 2014 ad hoc EU-SILC module on deprivation and well-being, allowing additional analysis and a refinement of the proposed indicator (Guio et al 2017).

Population of reference and frequency

In EU-SILC, data relating to the living conditions of children are not collected from the children themselves but from the adult answering the "household questionnaire" (household respondent). According to the survey protocol to be followed by countries, if in a given household at least one child does not have an item, it is then assumed that all the children belonging to that household lack that item.

For most child-specific items, the information relates to children aged between 1 and 15 (i.e. these items are collected in households with at least one child in this age bracket). Therefore, the child MD indicator covers only children aged between 1 and 15. One item is collected only in households with at least one child attending school (school trips).

These indicators will be computed each three years, on the basis on the thematic EU-SILC module on children.

Enforced lack

It is also worth highlighting that the items are based on an *enforced lack* concept. In the questions on child deprivation, three answer categories are proposed:

⁵ The most recent EU objectives for social protection and social inclusion were agreed in 2011 (Council of the European Union 2011). A set of commonly agreed EU social indicators is used for monitoring progress towards these objectives. This set is continuously fine-tuned and complemented with new measures. The EU body in charge of developing these EU social indicators is the Indicators Sub-Group of the EU Social Protection Committee (<http://ec.europa.eu/social/main.jsp?catId=830&langId=en>). On the use of EU social indicators and the methodological EU framework under which these are developed, see also: Atkinson et al (2002) and Marlier et al (2007).

⁶ After the 2005 Luxembourg EU Presidency, three EU Presidencies played an instrumental role in this context. These are the Presidencies held by Belgium (2010), Hungary (2011) and Cyprus (2012).

⁷ These recommendations were grouped into six categories: setting quantified objectives, assessing the impact of policies on child poverty and social exclusion, monitoring child poverty and well-being, a common framework for analysing and monitoring child poverty and social exclusion, reinforcing statistical capacity, and improving governance and monitoring arrangements at all relevant policy levels.

- the child(ren)/ child(ren)'s household has (have) the item;
- the child(ren)/ child(ren)'s household does (do) not have the item because it (they) cannot afford it;
- the child(ren)/ child(ren)'s household does (do) not have the item for any other reason.

Only children lacking an item for affordability reasons (and not by choice or due to any other reasons) are considered as deprived of this item. Those lacking the item “for other reasons” are treated, together with those who have the item, as not deprived.

Selection of items

The deprivation indicator focused on the specific situation of children presented in this paper is the result of a large number of tests and in-depth analyses carried out on both the 2009 and 2014 EU-SILC data. These analyses draw extensively on the 1999 and 2012 Poverty and Social Exclusion Survey deprivation indicator construction methodology, which has been used to develop robust and comparable measures of deprivation for various poverty surveys. Guio et al (2012) and Guio et al (2017) have tested the following criteria:

1. The *suitability* of each item, in order to check that respondents in the different Member States (as well as the different population sub-groups within each Member State) consider them necessary to have an “acceptable” standard of living in the country where they live. Here, “suitability” is understood as a measure of “face validity” amongst the EU population.
2. The *validity* of individual items, to ensure that each item exhibits statistically significant relative risk ratios with independent variables known to be correlated with deprivation.
3. The *reliability* of the scale, to assess the internal consistency of the scale as a whole - i.e., how closely related the set of items are as a group. This analysis is based on the Cronbach's Alpha statistic as well as on the Beta and Lambda coefficients; it is conducted as part of a Classical Test Theory (CTT) framework. This reliability analysis of the deprivation scale as a whole is complemented with additional tests on the reliability of each individual item in the scale using Item Response Theory (IRT) and by a Hierarchical Omega Analysis.
4. The *additivity* of items, to test that the indicator's components add up – i.e. that someone with a deprivation indicator score of “2” is suffering from more severe deprivation than someone with a score of “1”. Additivity was measured for the items that successfully passed the suitability, validity and reliability tests.

The items that successfully passed these four steps were considered to be robust candidates for being aggregated into a child-specific deprivation indicator. The detailed results of the tests are provided in Guio et al (2012) for the 2009 data and in Guio et al (2017) for the 2014 data.

The need of a holistic approach

Besides the items relating directly to the MD situation of children, the list of items that successfully passed both the robustness tests includes some household items, as not only items directly impacting on the immediate children's standard well-being should be included in the child index but also items likely to have an indirect impact on their well-being. In line with scientific evidence, this choice is motivated by the fact that we strongly believe that, in order to adequately measure children's deprivation, it is necessary to look not only at those items that solely affect children but also at those that affect the households in which they live and that are likely to impact on their (current and/or future) living conditions. The whole set of items affecting children's living conditions should then be included in a child deprivation indicator, regardless of the statistical unit it refers to (which, in many cases, primarily reflects a choice made on the basis of data collection rather than actual conceptual considerations). As highlighted by Atkinson et al (2002), the construction of indicators needs to follow a principle-based approach (see also Atkinson Commission on Global Poverty 2016); close links are required between the design of social indicators and the questions they are intended to answer. If the aim of the child deprivation indicator is to measure intra-household transfers or within-household differences in living standards, then all household-level items would need to be removed from the indicator.

By contrast, if, as we want to do here, the objective is to measure and compare the living standards of children in different households, then the relevant household-level items that have a direct effect on children's living conditions need to be included in the child deprivation indicator if they successfully pass the various robustness tests. This is particularly true where there is scientific evidence that these deprivations have worse or different effects on children than on adults (Marsh et al 2000).

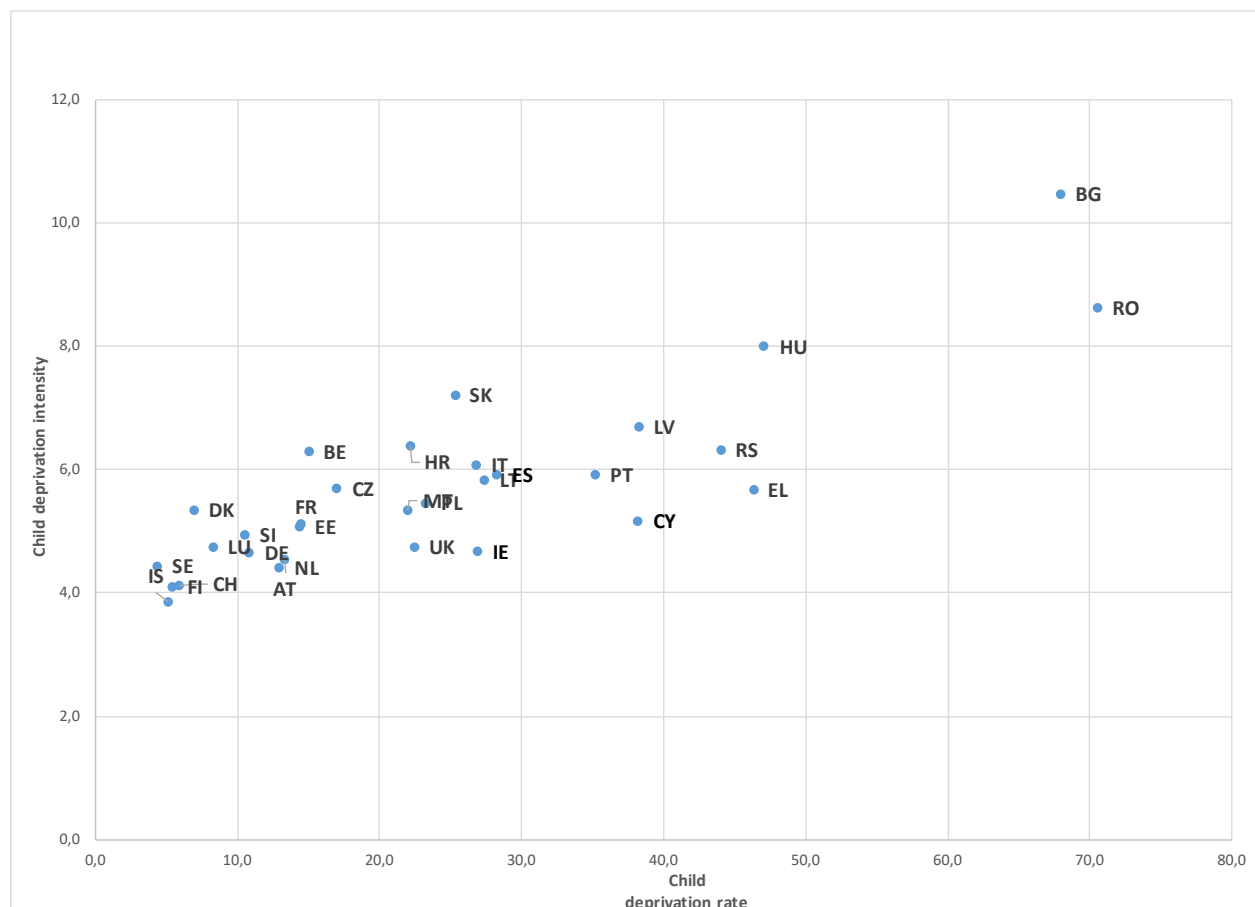
The inclusion of household items in a child indicator has to be interpreted from a holistic and life-cycle point of view. We consider items which directly and also indirectly impact on children's living standards (e.g. direct items such as inadequate warmth in home, lack of durables etc.). Qualitative studies have also shown that children in households suffering from financial strain often do not ask their parents for the things they need which cost money in order to try to protect their parents from stress and feelings of guilt (Ridge 2002 and 2011; Observatoire de l'Enfance, de la Jeunesse et de l'Aide à la jeunesse & Sonocom 2010). Thus we also include indicators of financial strain, such as arrears.

Unweighted indicators

The proposed indicator is based on the unweighted sum of 17 items for each child aged between 1 and 15 years (Guio et al, 2012 and Guio et al, 2017). It is self-evident that some items are more important than others. However, the consistently high levels of reliability of both the 17 individual items and the indicator itself suggest that no set of item weights (even if error-free) would, when applied to these items, lead to an index that represents child deprivation more accurately (Kline 2005).

National figures

Proportion of children (aged between 1 and 15 years) who lack at least three items (out of 17) and MD intensity (average number of items lacked among those lacking at least three items), EU-28 Member States and non-EU countries covered by EU-SILC, 2014



Source: EU-SILC 2014 cross-sectional data, Guio et al (forthcoming).

Reading note: In Bulgaria, the child deprivation rate attains 68% of children aged between 1 and 15 years. The average number of items lacked by these children (deprivation intensity) is 10.5.

References

- Atkinson Commission on Global Poverty (2016). "Monitoring Global Poverty. Report of the Commission on Global Poverty", Washington: The World Bank.
- Atkinson, T., Cantillon, B., Marlier, E. and Nolan, B. (2002). "Social Indicators: The EU and Social Inclusion", Oxford: Oxford University Press
- Belgian Presidency of the European Union, in collaboration with UNICEF, Eurochild and the European Commission (2010). "Call for an EU Recommendation on Child Poverty and Child Well-Being", A background paper to the EU Presidency Conference: Child Poverty and Child Well-Being, Brussels: Belgian Public Planning Service on Social Integration.
- Frazer, H., Marlier, E. and Nicaise, I. (2010). "A social inclusion roadmap for Europe 2020", Antwerp/Apeldoorn: Garant.
- Guio, A.-C., Gordon, D. and Marlier, E. (2012). "Measuring Material Deprivation in the EU. Indicators for the whole Population and Child-Specific Indicators", Eurostat Methodologies and working papers, Luxembourg: Publications office of the European Union.
- Guio, A.-C., Gordon, D., Marlier, E., Najera, H. and Pomati, M. (2017). "Towards an EU measure of child deprivation", Child indicators research, <https://doi.org/10.1007/s12187-017-9491-6>.
- Guio, A.-C., Marlier, E., Vandenbroucke, F. and Verbunt, P. (forthcoming). "Micro- and macro-drivers of child material deprivation in 31 European countries".
- Kline, T. (2005). "Psychological testing: A practical approach to design and evaluation", London: Sage.
- Marlier, E., Atkinson, A.B., Cantillon, B. and Nolan, B. (2007). "The EU and Social Inclusion: Facing the challenges", Bristol: The Policy Press.
- Marsh, A., Gordon, D., Pantazis, C. and Heslop, P. (2000). "Housing deprivation and health: A Longitudinal Analysis", Housing Studies, 15(3), pp. 411-428.
- Observatoire de l'Enfance, de la Jeunesse et de l'Aide à la jeunesse and Sonocom, (2010). "Recherche qualitative participative sur le vécu des enfants vivant dans la pauvreté de trente enfants âgés de 6 à 12 ans en Communauté française".
- Ridge, T. (2002). "Childhood Poverty and Social Exclusion: From a Child's Perspective", Bristol: The Policy Press.
- Ridge, T. (2011). "The everyday costs of poverty in childhood: a review of qualitative research exploring the lives and experiences of low-income children in the UK", Children and Society, 25(1), pp. 73-84.

Uganda National Household Survey 2016/17: Consensual Poverty Question Module.

Developed with the help and assistance of the Tonga Department of Statistics

SECTION 12B: CONSENSUAL POVERTY

CHILD ITEMS (ANY ONE BELOW 18 YEARS OF AGE)

Please say whether you think each of the following is essential for every parent or caregiver to be able to afford for children they care for in order for them to enjoy an acceptable standard of living in Uganda today. If you think it is essential please say 'ESSENTIAL'. If you think it is desirable but not essential please say 'DESIRABLE'. If you think it is not essential and not desirable please say 'NEITHER'. So the three possible answers are 'ESSENTIAL', 'DESIRABLE' or 'NEITHER'.

Item	Is [ITEM] 1=Essential 2= Desirable, but not essential 3= Neither 98= DK	Do you have [item]? 1=Have it 2= Don't have , can't afford 3= Don't have, don't want 4= Don't have, for another reason 98= DK/NA
	CP01	CP02
QC1 Three meals a day		
QC2 Two pairs of properly fitting shoes, including a pair of all-weather shoes		
QC3 Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)		
QC4 Books at home suitable for their age (including reference and story books)		
QC5 Some new clothes (not second hand or handed on/down)		
QC6 Educational toys and games		
QC7 A visit to a health facility when ill and all the medication prescribed to treat the illness		
QC8 Own bed		
QC9 Own blanket		
QC10 Two sets of clothing		
QC11 Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid		
QC12 All fees, uniform of correct size and equipment required for school (e.g. books, school bag, lunch/lunch money, stationery)		
QC13 To be able to participate in school trips or events that cost money		
QC14 A desk and chair for homework for school aged children		
QC15 Bus/taxi fare or other transport (e.g. bicycle) to get to school		
QC16 Own room for children over 10 of different sexes		
QC17 Some fashionable clothes for secondary school aged children		
QC18 Own cell phone for secondary school aged children		

HOUSEHOLD ITEMS (relevant to all household members)

Please say whether you think each of the following is essential for everyone to be able to afford in order for them to enjoy an acceptable standard of living in Uganda today. If you think it is essential please say 'ESSENTIAL'. If you think it is desirable but not essential please say 'DESIRABLE'. If you think it is not essential and not desirable please say 'NEITHER'. So the three possible answers are 'ESSENTIAL', 'DESIRABLE' or 'NEITHER'

Item	Is [ITEM] 1=Essential 2= Desirable, but not essential 3= Neither 98= DK	Do you have [item]? 1=Have it 2= Don't have , can't afford 3= Don't have, don't want 4= Don't have, for another reason 98= DK/NA
	HP01	HP02
QH1 Enough money to repair or replace any worn out furniture		
QH2 Enough money to repair or replace broken electrical goods, e.g. a refrigerator		
QH3 To be able to make regular savings for emergencies		
QH4 To be able to replace broken pots and pans for cooking		
QH5 Enough money to repair a leaking roof for the main living quarters		
QH6 Have your own means of transportation (e.g. car, bike, motorcycle, etc)		

ADULT ITEMS (relevant to household members aged 18+)

Please say whether you think each of the following is essential for every adult (18+ years) to be able to afford in order for them to enjoy an acceptable standard of living in Uganda today. If you think it is essential please say 'ESSENTIAL'. If you think it is desirable but not essential please say 'DESIRABLE'. If you think it is not essential and not desirable please say 'NEITHER'. So the three possible answers are 'ESSENTIAL', 'DESIRABLE' or 'NEITHER'

Item	Is [ITEM] 1=Essential 2= Desirable, but not essential 3= Neither 98= DK	Do you have [item]? 1=Have it 2= Don't have , can't afford 3= Don't have, don't want 4= Don't have, for another reason 98= DK/NA
	AP01	AP02
QA1 A visit to a health facility when ill and all the medication prescribed to treat the illness		
QA2 Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)		
QA3 Two pairs of properly fitting shoes, including a pair of all-weather shoes		
QA4 A small amount of money to spend each week on yourself		
QA5 Replace worn-out clothes by some new (not second-hand) ones		
QA6 To get together with friends/family (relatives) for a drink/meal at least once a month		
QA7 Celebrations on special occasions, such as Christmas, Eid.		
QA8 Attend weddings, funerals and other such occasions		
QA9 Able to access safe, reliable public transport , such as buses and boats		
QA10 Enough money to pay school fees for children		
QA11 Enough money to take children to a medical facility when sick		

Adult & household deprivation questions which have been used in socially perceived necessities (SPN) surveys in over 50 countries across the World

ADULT Deprivations	Europe	Africa	Asia	Oceania	America
Diet					
ENOUGH MEALS					
Two meals a day	UK			PI	
Having at least two good meals a day					CA
Three meals a day		CW	HK,V N,JP,T W		
PROTEIN					
Meat or fish or vegetarian equivalent every other day	EU,U K		HK		CA
Fish, meat, egg or vegetarian equivalent every other day			TW		
Meal with meat, fish or chicken (or vegetarian equivalent) at least each 2nd day				NZ	
Meat or fish or vegetarian equivalent every day		SA			
Eat meat or fish every day	RU	BJ			
Eat meat every day		CW			
Meat once a week			VN		
DIET QUALITY					
Fresh fruit or vegetables every day	UK,R U		HK,T W		CA
Fruits at least once a day			JP		
Eat tubers/cereals/rice every day		CW			
Eat vegetables every day		CW			
During the last fortnight was there ever a day (i.e. from getting up to going to bed) when you did not have a substantial meal due to lack of money?	UK, IE				
During the last two weeks was there a day when you ate no cooked meal at all (I mean from getting up to going to bed)	UK				
Cannot afford to buy the food the family needs			JP		
Not having (Or hardly) the means to ...- buy basic food (bread, milk, apples, potatoes, vegetables)	RU				
Health foods			TW		
SPECIAL MEALS					
Eat fresh/frozen poultry for special occasions (e.g. Chinese New Year)			HK		
A roast joint (or vegetarian equivalent) once a week	UK,IE				
A special meal once a week				AU	
A family take-away or bring-home meal once a month		SA			
Cooked breakfast most days	UK				
A cooked main meal	UK				
Clothing					
KEEPING WARM					
Clothing sufficient to keep you warm and dry		SA			
Enough warm clothes for cold weather			HK		
A warm waterproof coat	UK				
A warm winter coat					CA
Does each household member possess a warm waterproof coat?	IE				
Warm jacket/coat			TW		
BEING RESPECTABLE					
One set of decent clothes (e.g. for job interview / Chinese New Year)			HK		

celebration)					
Suitable clothes for important or special occasions				NZ	
Clothes to wear for social or family occasions such as parties or special church occasions				PI	
Special suits for occasions (funerals, weddings, etc.)			JP		
Decent clothes for formal occasions or celebrations			TW		
Appropriate clothes to wear for job interviews	UK		JP		CA
An outfit to wear for social or family occasions such as parties and weddings	UK				
A dressing gown	UK				
ADEQUATE SHOES					
Two pairs of all-weather shoes	UK				
Two pairs of properly fitting shoes (including a pair of all-weather shoes)	EU	UG		PI	
Two pairs of shoes in good repair and suitable for everyday use				NZ	
Does each household member possess two pairs of strong shoes?	IE				
Two pairs of outdoor shoes			TW		
Having at least two pairs of shoes		CW			
Have several pairs of shoes (at least two)		BJ			
Do [you/you and each member of your household] have at least two pairs of properly fitting footwear including a pair of suitable winter footwear?					CA
ENOUGH CLOTHES					
Have a change of clothes (at least two)		BJ			
Having at least two outfits		CW			
Having 3 pairs of socks/stockings in good repair	UK				
NEW CLOTHES					
Replace worn out clothes with new (not second hand) ones	EU,U K	UG		PI	
Some new (not second hand or handed-down) clothes	RU	SA			
Some new clothes every year			TW		
One or two pieces of new clothes in a year			HK		
Do household members buy new rather than second-hand clothes?	IE				
Having mostly new, not second hand clothes					CA
Buy new underwear once a year			JP		
Health					
DOCTORS & MEDICINES					
All medicines prescribed by your doctor	UK	SA			CA,MX
Able to buy medicines prescribed by a doctor				AU	
All medicines prescribed by your doctor when you are sick				PI	
visit to a health facility when ill and all the medication prescribed to treat the illness		UG			
Afford health care		CW			
To be able to see a doctor when needed			JP		
Able to consult private doctor when you are sick			HK		
Able to consult Chinese medicine practitioner when you are sick <u>and</u> purchase prescribed medicines			HK		
Medical care when required					MX
Medical screenings for timely detection of diseases					MX
X-ray and laboratory tests (Doctor recommended)					MX
DENTAL HEALTH					
All recommended dental work/treatment	UK				
Dental treatment if needed				AU	CA,MX
Regular dental check-up once a year			HK		
Regular dental check-ups					MX
To be able to see a dentist when needed			JP		
OPTICAL HEALTH					

Can pay for spectacles if needed	UK				
Regular eye check once a year <u>and</u> able to afford spectacles if needed			HK		
Health products such as glasses, artificial teeth and hearing aids			TW		MX
HEALTH INSURANCE					
Private health insurance	UK				
National health insurance			TW		
PERSONAL CARE					
Domestic medicine cabinet					MX
Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)		UG			MX
Afford personal needs		CW			
Having personal care items, such as razors or feminine hygiene products					CA
Able to take care of ones' body (soap, hairdresser, etc.)		BJ			MX
Able to buy cleaning products (soap, wax, etc.)		BJ			MX
Hair done or cut regularly	UK				
Being able to get a professional haircut every one or two months					CA
Housing Conditions					
DAMP					
Damp free home	UK,R U				
Damp and mould free walls and floors				AU	
Roof and gutters that do not leak				AU	
Enough money to repair a leaking roof for the main living quarters		UG			
WARMTH					
Heating to keep home adequately warm	UK, IE,RU				CA, MX
Are you able to keep your house or apartment at a comfortable temperature					CA
Have you ever had to go without heating during the last 12 months through lack of money? (I mean have you had to go without a fire on a cold day, or go to bed to keep warm or light the fire late because of lack of coal/fuel?)	IE				
Heating in at least one room of the house				AU	
Central heating	UK,R U				
UTILITIES					
Mains electricity	UK	SA			
To have access to water and electricity		CW			
Piped water to the home					MX
TOILETS & BATHROOMS					
Indoor toilet, not shared with another household	UK,R U				
Facilities inside the home and no need to share with other families (e.g. kitchen, toilet, bathroom, water heater)			HK,JP		
Have toilet inside a self-contained apartment, with no need to share with other residents			HK		MX
Toilet – built of stone			VN		
A flush toilet		SA			
Bath, not shared with another household	UK				
A bathroom			VN		
A second bathroom (with shower or bath)	UK				
A bath or shower in the house	RU	SA			
SECURITY					
Home security (burglar alarm) system	UK	SA			

Secure locks on doors and windows				AU	
Burglar bars in the house		SA			
A fence or wall around the property		SA			
An armed response service for the house		SA			
ADEQUATE CONDITIONS					
Enough money to keep your home in a decent state of decoration	UK,R U		TW		
Carpets in living rooms and bedrooms in the home	UK				
A spare bedroom (for visitors to sleep)	UK				
Separate bedrooms for adults and children		SA			
A second home	UK,IE				
Separate kitchen	UK,R U				MX
A Living Room					MX
A Garden		SA			
A house that is strong enough to stand up to the weather e.g. rain, winds etc		SA			
Stone built house			VN		
To have housing (owner or rented)		CW			
Having spacious housing (rented or not)		BJ			
Two or more bedrooms			JP		
Bedroom different from dining room			JP		
Hot water heater (for kitchen and wash basins)	RU		TW,JP		MX
Is your house of apartment free of unwanted pests, such as cockroaches, mice or bedbugs	UK				CA
Household durables					
FURNITURE					
Beds and bedding for everyone in the household	UK		TW		MX
Bedding for everyone in the household			JP		
Beds for everyone in the household	UK				
Thick blanket			VN		
Curtains or window blinds	UK				MX
A table, with chairs, at which all the family can eat	EU,U K				MX
Table and chairs made of good wood			VN		
To have tables and beds in the house		CW			
A sofa/lounge suite		SA			
Furniture for sitting (armchairs) in Living Room					MX
Durable furniture			TW		
Two compartment wooden wardrobe			VN		
Wardrobe in bedroom					MX
Bureau or bedside table					MX
Enough money to replace worn out furniture	UK,R U			PI	CA
Does the household replace any worn out furniture?	IE				
Enough money to repair or replace any worn out furniture		UG			
Able to replace worn out furniture			HK		
Being able to replace broken or damaged furniture					CA
Furniture in reasonable condition				AU	
COOKING					
A refrigerator		SA	HK,T W,VN, JP		MX
Deep freezer/fridge freezer	UK				
Gas cooker			TW,V		

			N		
Gas or electric cooker	UK				MX
Microwave oven	UK		TW,JP		CA,MX
A rice cooker			HK,T W,VN		
Wooden rice chest			VN		
Enough money to replace / repair broken electrical goods (e.g. refrigerator or washing machine)	UK	UG			
Enough money to repair broken goods such as a refrigerator or washing machine				PI	
Able to replace / repair broken electrical goods (e.g. refrigerator or washing machine)			HK		CA
To be able to replace broken pots and pans for cooking		UG			
Kettle			JP		
Teflon pans					MX
Blender/Food processor					CA,MX
Dish dryer			TW		
Dishwasher	UK			AU	
CLOTHING					
A washing machine	EU,U K,RU	SA	HK,T W	AU	MX
Clothes dryer				AU	MX
Sewing machine					MX
Electric iron	UK				MX
KEEPING COOL					
A fan			HK,T W,VN		MX
An air-conditioner			HK,T W,JP		MX
Dehumidifier			TW		
OTHER DURABLES					
Vacuum cleaner	UK				CA,MX
Camera			HK		
Stereo/music player/MP3 player			TW		CA,MX
Water pump			VN		
Watch			VN		MX
House clock					MX
Towels					MX
Suitcases					MX
Information					
BROADCAST MEDIA					
Radio	UK	SA,C W	TW,V N		MX
A television	UK,R U	SA,C W	HK,T W,VN	AU	MX
Colour TV	EU				
High Definition Plasma or LCD TV	UK				
Pay TV (eg. Sky, Virgin, etc.)	UK				MX
Cable TV			TW		CA
Satellite Television/DSTV		SA			
TELEPHONE					
Telephone at home (landline or mobile)	EU UK,R U		JP	AU	MX
A landline phone		SA			

A telephone at home			HK,VN,		
A mobile phone or telephone landline			HK		CA
A mobile phone	EU,UK,IE	SA	HK,TW	AU	MX
Fax machine				AU	
Answer machine				AU	
COMPUTERS & INTERNET					
Do you have a computer?	EU				
Home Computer	UK	SA	TW	AU	CA,MX
A computer with internet connection at home			HK		
A computer device with internet connection at home			HK		
Internet connection at home	EU,UK		TW,JP	AU	CA,MX
Printer				AU	MX
OTHER					
Does your household buy a daily newspaper?	UK,IE		TW		
A dictionary	UK				
A Video Cassette recorder	UK,RU		JP		
CD player	UK		TW,JP		CA
DVD player		SA	TW	AU	MX
A packet of cigarettes every other day	UK				
Transport					
OWN TRANSPORT					
Car	EU,UK,RU	SA	TW	AU	MX
Have your own means of transportation (e.g. car, bike, motorcycle, boat, etc)		BJ,UG		PI	
Motorbike/Motorcycle			TW,VN		MX
Bicycle			VN		MX
A second car or other vehicle (NOT motorcycle)	UK				
A lock-up garage for vehicles		SA			
ACCESS TO PUBLIC TRANSPORT					
Able to access to safe, reliable public transport , such as buses and boats		UG			
Afford taxi/ bus/ pickup/ motorbike to work		CW			
Able to take the bus (or equivalent) to work		BJ			
Able to take a taxi if necessary (emergency)		BJ			MX
Are [you/you and your household] always able to get around your community, either by having a car or by taking the bus or equivalent mode of transportation?					CA
Financial Strain					
MONEY FOR SELF					
A small amount of money to spend each week on yourself, not on your family	UK	SA	HK	PI	
A small amount of money to spend on yourself			TW		CA
Spend a small amount of money each week on yourself	EU	UG			
INSURANCE					
Household contents insurance	UK				
Home contents insurance				NZ,AU	
Insurance for death, accidents, illness, etc.			JP		
Have life insurance					MX
Housing insurance (Fire insurance, earthquake insurance)			TW		

Ability to pay or contribute to funerals/funeral insurance/burial society		SA			
Comprehensive motor vehicle insurance				AU	
SAVINGS					
Regular savings (of at least XX a month) for rainy days	UK		TW		
Having regular savings of at least about XX dollars per month for rainy days or retirement					CA
Regular savings for emergencies		SA		PI	
Having regular savings of at least XX a month for emergencies					CA
Up to \$500 in savings for an emergency				AU	
Regular payments into an occupational or private pension	UK				
Pension premiums to prepare for retirement			JP		MX
EXPENSES					
Pay an unexpected, but necessary, expense of £750	UK				
Can your household afford an unexpected required expense (amount to be filled) and pay through its own resources?	EU				
Can your household afford an unexpected expense of (Ir=€987, NZ=\$500) without borrowing?	IE			NZ	
Could your household cover an unexpected expense today of \$500 from your own resources					CA
Are you currently able to pay your bills on time					CA
Social Activities & Family Life					
CELEBRATIONS					
Celebrations on special occasions such as Christmas	UK				
Celebrations on special occasions, such as Christmas, Eid.		UG			
Celebrations on special occasions (e.g. Chinese New Year)			HK,T W		
Celebrations on special occasions, such as birthdays, Christmas or religious festivals				PI	
New Year's celebration (such as Osechi – a special meal for the New Year's Day)			JP		
Celebrating birthdays					MX
Special meal at Christmas or equivalent festival		SA			
EATING WITH FRIENDS					
Friends or family round for a meal or drink at least once a month	UK,IE				CA
Inviting friends and relatives for a meal, snack or drink			TW		
A meal out with friends or family at least once a month			HK		
At least having a meal in a decent restaurant once a month			TW		
A meal in a restaurant once a month	UK				
Eating out 2 or 3 times a month			JP		
Get-together with friends/family (relatives) for a drink/meal at least once a month	EU	UG		PI	
A meal out once a month	UK				
Going out for a drink once a fortnight	UK				
Did you have a morning, afternoon or evening out in the last fortnight, for your entertainment (something that cost money)?	IE				
VISITING FRIENDS/FAMILY					
Visits to friends or family in other parts of the country 4 times a year	UK				
Coach/train fares to visit family/friends in other parts of the country four times a year	UK				
Transportation costs to see friends, family, relatives			JP		
Visits to friends or relatives			TW		
HOLIDAY					
A holiday away from home for one week a year, not staying with relatives	UK	SA			CA
Can your whole household afford to go for a week's annual holiday, away from home, including stays in second dwelling or with friends/relatives?	EU				

Can your whole household afford to go for a week's annual holiday, away from home?	IE				
A week holiday away from Hong Kong once a year			HK		
Holiday once a year			VN		
Holiday away from home once a year		BJ	TW		MX
Holidays abroad once a year	UK				
A week's holiday away from home each year				AU	
DAYS OUT					
A morning, afternoon or evening out in the last fortnight	UK, IE				
Family trip of more than one night at least once a year			JP		
Having a day trip within the country (e.g. driving, pilgrimage)			TW		
Go out with friends or family for leisure activities at least once a month (e.g. watching movie, taking part in sport activities)			HK		
Going out socially once a fortnight	UK				
Going to the cinema, theatre or music event once a month	UK				
Go to movies or theatre					MX
IMPORTANT SOCIAL EVENTS					
Attending weddings, funerals and other such occasions	UK	UG	TW		
Can offer a gift of money on occasion of wedding			HK		
Attending weddings, funerals and other such occasions, including giving gifts			JP		
Visiting friends or family in hospital or other institutions	UK	SA	TW		
Enough money to be able to visit friends and family in hospital or other institutions				PI	
PRESENT GIVING					
Presents for friends or family once a year	UK,IE			PI,AU	
Give red pocket money (laisee) during Chinese New Year			HK,T W		
Presents for friends or family on special occasions				NZ	
Having enough money to give presents on special occasions such as birthdays, weddings, funerals		SA			
Presents for friends or relatives while visiting them			TW		
Able to offer gifts when necessary		BJ			
Are you able to buy some small gifts for family or friends at least once a year					CA
Give gifts to someone outside the home					MX
LEISURE ACTIVITIES					
Taking part in sport/exercise activities or classes	UK				MX
Regularly participate in a leisure activity such as sport, cinema, concert	EU				
Do the household members have hobbies or leisure activities?	UK,IE				CA
A hobby or leisure activity (e.g. Basketball, jogging, gym, yoga)			TW		
A hobby or a sport			JP		MX
Joining activities held by community, organisation or club (e.g. elderly club)			TW		MX
Go to KTV or Karaoke			TW		
Shopping			TW		

Notes:

1) EU – The 28 European Union Member States (i.e. Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK) – deprivation module questions in EU-SLIC 2009, 2013 & 2014. Slight wording variation by country

2) CW – The African Countries which used the Core Welfare Indicator Question (CWIQ) Survey with the Minimum Standard of Living module (i.e. Benin, 2006, Gabon 2005, Guinea 2007, Liberia 2007 & 2010, Mali 2006, Niger 2007) – slight wording variation by country.

3) PI – Pacific Island States (i.e. Tuvalu, Tonga and the Solomon Islands)

4) Two letter country codes – Australia (AU), Benin (BJ), Canada (CA), Hong Kong (HK), Ireland (IE), Japan (JP), Mexico (MX), Russia (RU), South Africa (SA), Taiwan (TW), Uganda (UG), United Kingdom (UK), Vietnam (VN)

Child deprivation questions which have been used in socially perceived necessities (SPN) surveys in almost 50 countries across the World

Child Deprivations	Europe	Africa	Asia	Oceania	America
Diet					
ENOUGH MEALS					
Three meals a day	UK,EU	UG,SA	HK	PI	
Meat/fish/vegetarian equivalent at least twice a day			HK		
Meat/fish/vegetarian equivalent at least once a day	UK				
One meal with meat, chicken or fish (or vegetarian equivalent) at least once a day	EU				
One meal with meat, chicken or fish or vegetarian equivalent daily.				PI	
Eat meat, fish or a vegetarian equivalent at least every other day?					CA
A meal with meat, fish, or vegetarian equivalents at least every second day			CN		
DIET QUALITY					
Fresh fruit or vegetables at least once a day	UK		HK,CN		
Fresh fruit and vegetables once a day	EU				
Eat fresh fruit and vegetables every day					CA
Clothing					
KEEPING WARM					
A warm winter coat	UK				
Clothing sufficient to keep warm and dry		SA			
Enough warm clothes for cold weather			HK		
Clothes suitable for every season			CN		
SCHOOL UNIFORM					
All the school uniform required by the school	UK				
All school uniform required			CN		
School uniforms of correct size every year			HK		
School uniforms of correct size			HK		
All school uniform and equipment required (e.g. Books, pens, etc.)				PL	
NOT BEING EMBARRASSED					
Some fashionable clothes for secondary school aged children		UG,SA			
Designer/brand name trainers	UK				
Brand name trainers			HK		
Clothes to fit in with friends	UK				
ADEQUATE SHOES					
New, properly fitting shoes	UK			PI	
Two pairs of properly fitting shoes (including a pair of all-weather shoes)	EU	UG			
Shoes for different activities		SA			
Properly fitted shoes (e.g. leather shoe and sport shoe)			HK		
New, properly fitted shoes (e.g. leather shoe and sport shoe)			HK		
Shoes can be replaced by a new pair once unfitted or worn			CN		

ENOUGH CLOTHES					
At least 4 pairs of trousers, leggings, jeans or jogging bottoms	UK				
At least seven pairs of new underpants or knickers in good condition, bought new	UK				
At least four jumpers, cardigans or sweatshirts	UK				
Two sets of clothing		UG			
NEW CLOTHES					
Some new, not second-hand clothes	UK,EU			PI	
Some new, not second-hand or handed-on clothes	UK				
Some new clothes (not second hand or handed on/down)		UG			
Some new clothes		SA			
Some new, not all clothes are old ones from siblings			HK		
Able to afford some new clothes			HK		
New clothes and shoes for all children for Chinese New Year			HK		
Clothes, socks, and underwear can be replaced by new ones once worn			CN		
New clothes and shoes every year (not a second-hand)			JP		
Health					
DOCTORS & MEDICINES					
Unmet need for consulting a GP or specialist, excluding dentists and ophthalmologists	EU				
A visit to a health facility when ill and all the medication prescribed to treat the illness		UG			
A visit to the doctor when ill and all medicines required		SA			
DENTAL HEALTH					
An annual dental check-up for children				AU	
Get dental care if needed?					CA
Unmet need for consulting a dentist	EU				
PERSONAL CARE					
Toiletries to be able to wash every day (e.g. soap, hairbrush/comb)		UG,SA			
Education					
BOOKS					
Books at home suitable for their ages	UK,EU				
Books at home suitable for their ages (including reference and story books)		UG			
Books at home suitable for their ages (including reference books and supplementary exercises)			HK		
Books (for children of school age)			CN		
Up to date schoolbooks and new school clothes				AU	
Story books		SA			
SCHOOL EQUIPMENT & TRIPS					
Going on a school trip at least once a term	UK		HK		
Participate in school trips and school events that cost money	EU	UG		PI	
A school trip once a term for school aged children		SA			
All fees, uniform of correct size and equipment required for school (e.g. books, school bag, lunch/lunch money, stationery)		UG			

Children can participate in school activities and outings				AU	
Join (self-paying) school outings at least once a semester			CN		
School lunch box			HK		
All fees, uniform and equipment required for school		SA			
EDUCATIONAL GAMES					
Educational games	UK				
Educational toys and games		UG,SA			
Educational games (e.g. chess)			HK		
EXTRA LESSONS					
Tutorial lessons after school			HK		
Tutorial classes after school			CN		
Juku (private tutoring classes)			JP		
LENGTH OF EDUCATION					
Education up to University or Junior university			JP		
All children studying up to secondary level (3)			VN		
Children's possessions					
LEISURE EQUIPMENT (OUTDOOR)					
Outdoor leisure equipment such as roller skates, skateboards, footballs, etc	UK				
Outdoor leisure equipment (bicycle, roller skates, etc.)	EU				
Outdoor leisure equipment (e.g. racket or football)			HK		
Leisure equipment (e.g. sports equipment or a bicycle)	UK				
Leisure/sports equipment		SA			
MUSIC					
MP3 player such as an iPod	UK				
An MP3 player/iPod for secondary school aged children		SA			
Walkman, CD/MD Player, etc			JP		
hi-fi/CD player and some tapes/CDs for school aged children		SA			
COMPUTERS & INTERNET					
Computer and internet for homework	UK				
Computer suitable for school work	UK				
A computer in the home for school aged children		UG			
A computer device with internet connection at home			HK		
Computer			CN		
Internet connection at home			CN		
Computer games	UK				
A PlayStation/Xbox for school aged children		SA			
TOYS & GAMES					
Indoor games suitable for their ages (building blocks, board games, computer games etc)	UK				
Indoor games (educational baby toys, building blocks, board games, computer games, etc.)	EU				
Toys (e.g. dolls, play figures, teddies, etc.)	UK				
For parents or other carers to be able to afford toys for children to		SA			

play with					
Toys (for primary school children)			CN		
Construction toys such as Duplo or Lego	UK				
Toys such as sports equipment and games			JP		
BICYCLE					
Bicycle	UK			PI	
A bike, new or second hand	UK		CN		
Bicycle (or tricycle)			JP		
MOBLIE					
Mobile phone for children aged 11 or older	UK		HK		
Own cell phone for secondary school aged children		UG,SA			
Housing & Environment					
BEDS & BEDROOMS					
Child's own room			JP		
Enough bedrooms for every child of 10 or over of a different sex to have their own bedroom	UK				
Own room for children over 10 of different sexes		UG			
Own room for children over 10		SA			
Partitioning for every child over 10 of different sex to have his/her own space			HK		
Enough beds and bedding for every child in the household				PI	
A bed and bedding to her/himself	UK				
Own bed		UG,SA			
Child has own bed			CN		
A separate bed for each child				AU	
Own blanket		UG			
A carpet in their bedroom	UK				
HOMEWORK					
A suitable place at home to study or do homework	UK,EU		HK	PI	
Study desk			CN		
A desk and chair for homework for school aged children		UG,SA			
A SAFE PLACE TO PLAY OUTSIDE					
A garden or outdoor space nearby where they can play safely	UK				
Outdoor space in the neighbourhood where children can play safely	EU				
Somewhere for children to play safely outside of the house		SA			
A local park or play area for children				AU	
A garden to play in	UK				
Transport					
Bus/taxi fare or other transport (e.g. bicycle) to get to school		UG			
Access to public transport like the railway networks or bus services			HK		
Bus/taxi fare or other transport to get to school		SA			
Finance					
Pocket money	UK		JP		
Pocket money for his/her own			HK		

Money to save	UK				
At least 50 pence a week to spend on sweets	UK				
Pocket money/allowance for school aged children		SA			
Social Activities & Family Life					
CELEBRATIONS					
Celebrations on special occasions such as birthdays, Christmas or other religious festivals	UK				
Celebrations on special occasions such as birthdays, Christmas or religious festivals				PI	
Celebrations on special occasions (birthdays, name days, religious events, etc.)	EU				
A birthday party each year		SA			
Celebrating a birthday			JP		
FRIENDS					
Friends round for tea or a snack once a fortnight	UK				
Invite friends round to play and eat from time to time	EU				
Invite friends home at least once a month			CN		
A meal out with friends at least once a month			HK		
Go out with friends or family for leisure activities at least once a month (e.g. watching movie, taking part in sport activities)			HK		
Toddler group or nursery or play group at least once a week for pre-school aged children	UK				
Play outside (e.g. park) with friends at least once a week			CN		
Staying with family or friends during the last 12 months	UK				
HOLIDAY					
A holiday away from home for at least one week a year	UK				
A holiday away from home at least one week a year with his or her family	UK				
Go on holiday away from home at least 1 week per year	EU				
DAYS OUT					
Day trips with family once a month	UK				
A family day trip at least four times a year (e.g. going to Lantau Island, Amusement parks)			HK		
A meal out with children at least once a month			HK		
Eat out with family at least once a month			CN		
Travel with family at least five days a year			CN		
IMPORTANT SOCIAL EVENTS					
Visit relatives and friends on traditional festivals			CN		
PRESENTS					
Presents for children once a year on special occasions, e.g. birthdays, Christmas, Eid		UG			
Presents on special occasions (e.g. birthdays and Christmas)			HK		
Xmas present			JP		
Buy some small gifts for family or friends at least once a year?					CA
Presents at birthdays, Christmas		SA			

LEISURE ACTIVITIES					
A hobby or leisure activity	UK			AU	CA
Swimming at least once a month	UK				
Children's clubs or activities such as drama or football training	UK				
Participation in extra-curricular activities (e.g. sports, music)			HK		
Child clubs			JP		
Interest classes			CN		
Regular leisure activity (swimming, playing an instrument, youth organisations, etc.)	EU				
Toys or materials for a hobby		SA			

Notes:

1) EU – The 28 European Union Member States (i.e. Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK) – deprivation module questions in EU-SLIC 2009, 2013 & 2014. Slight wording variation by country

2) CW – The African Countries which used the Core Welfare Indicator Question (CWIQ) Survey with the Minimum Standard of Living module (i.e. Benin, 2006, Gabon 2005, Guinea 2007, Liberia 2007 & 2010, Mali 2006, Niger 2007) – slight wording variation by country.

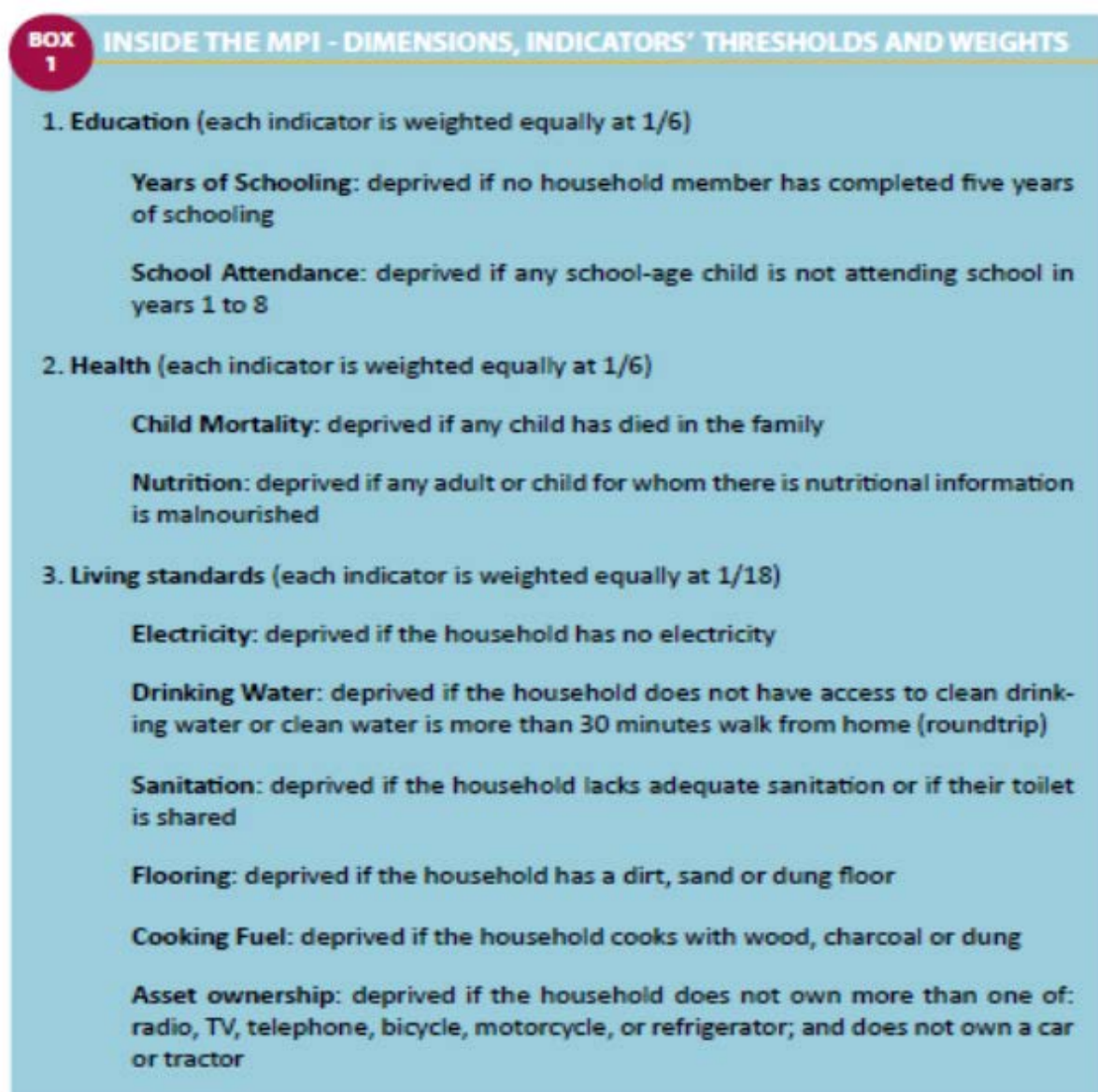
3) PI – Pacific Island States (i.e. Tuvalu, Tonga and the Solomon Islands)

4) Two letter country codes – Australia (AU), Benin (BJ), Canada (CA), China (CN), Hong Kong (HK), Ireland (IE), Japan (JP), Mexico (MX), Russia (RU), South Africa (SA), Taiwan (TW), Uganda (UG), United Kingdom (UK), Vietnam (VN)

The Problem with the UNDP Multidimensional Poverty Index Measure

The UNDP has proposed that countries across the world adopt its Multidimensional Poverty Index (MPI) measure. We believe that the MPI is a highly problematic measure to use in PICTs as it is likely to be a highly unreliable measure in almost all these countries and territories. The global Multidimensional Poverty Index (MPI) has been designed to produce poverty estimates in developing countries based on the populations' health, education and living standards. Figure 1 shows the definitions of each indicator and how these are grouped into the three dimensions: Standard of Living, Education and Health. The MPI uses severe thresholds to measure poverty, i.e. it assumes that the indicators are good measures of deprivation and/or very low living standards. The 10 indicators of the MPI are given the same weights within each dimension and each of the three dimensions are in turn weighted equally such that the total sum of the weighted indicators equals 1 (or 100%). This means that the higher the weighted score the higher the severity of poverty of the household.

Figure 1. Structure of the Multidimensional Poverty Index



Source: OPHI, 2015, p6.

The multidimensionally poor population is identified as those with a weighted score of 33% or over. The MPI also provides a measure of the depth of poverty based on the average weighted deprivation score. The MPI multiplies the intensity (depth) by the poverty rate (headcount) to provide country-level estimates of “MPI poverty” or “adjusted headcount ratio”. The MPI adjusted headcount ratio is not a percentage it is a number which can range between zero and the MPI poverty headcount rate. The MPI adjusted headcount ratio has no units (it is just a number) so its meaning is unclear to both statisticians and policy makers.

Unlike rights-based measures, the unsatisfied basic needs approach or the consensual method, the MPI lacks a clear definition of poverty. The MPI draws upon Amartya Sen’s Capability Theory, it is however unclear how the ten indicators and their binary thresholds measure achieved functionings or capabilities i.e. how Capability Theory justifies these particular indicators for use in PICTs and not some alternative set of indicators. The MPI makes a number of assumptions in its measurement of poverty:

- a) the indicators measure acute poverty and are sufficient to consistently identify the poor from the not poor,
- b) the thresholds of the indicators provide the best possible split between the populations of interest, the poor and the not poor,
- c) multidimensional poverty has three dimensions and
- d) the weighting scheme is correct and does not distort the measurement of poverty.

These assumptions can be tested empirically and the claim that the MPI is a useful or good measure of (acute) poverty in PICTs will hold or not depending on whether these four core assumptions are correct. This idea of examining the assumptions of a measure has been at the core of Measurement Theory, which provides a framework with a series of principles that when fulfilled guarantee a robust measure (Raykov and Marcoulides, 2007; Streiner et al., 2015; Bartholomew, 1987). First, the indicators of an index must be consistent, i.e. the indicators and their thresholds should identify the ‘poor’ from the ‘not poor’ (MPI assumptions a and b, see above). This principle is called discrimination and will be useful to assess whether an indicator such as child mortality is a trustworthy measure of poverty in PICTs. Second, the structure of a multidimensional index (i.e. the three MPI dimensions) and its weights should be an adequate model to represent poverty (MPI assumptions c and d, see above). That is, the MPI model needs to be valid in PICTs.

Unfortunately, the equal weighting scheme within and between dimensions used by the MPI is essentially arbitrary. This means that even if the ten MPI indicators and thresholds are valid and reliable measures in a country, the addition of arbitrary weights is highly likely to add systematic bias to the resulting poverty measure i.e. arbitrary weights can turn a good set of indicators into a highly biased measure. Weights are frequently used in social surveys to correct for systematic biases in data (such as differential non-response) to produce unbiased point estimates – but these kinds of weights are model based and are never arbitrary.

The implication of measurement theory for the analysis of poverty indices is that all poverty measures should consistently identify which people/households are ‘poor’ and which are ‘not poor’. They also need to measure poverty accurately and not some other phenomenon and not be subject to a lot of random error (i.e. reliability), to ensure poverty rates can be compared over time and in different regions. In other words, an index needs to be both valid and reliable.

Unfortunately, the global MPI measure has been shown to be an unreliable measure of multidimensional poverty in all middle income and most low income countries where it has been tested. This is unsurprising as many of the MPI indicators and thresholds are similar to those used by Gordon et al (2003) to measure severe multidimensional child poverty in the developing world. These indicators and thresholds were specifically selected to measure the worst poverty in the poorest low income countries. They were designed to yield a poverty rate of zero in ‘rich’ countries and very low rates in middle income countries – so it is therefore unsurprising that the UNDP MPI does not produce reliable prevalence estimates in middle and high income countries. An additional problem, is that the deprivation indicators in the MPI were mainly designed for use in large countries not for use in Small Island Developing States (SIDS).

The MPI Policy Problem

There is a significant problem with using the adjusted headcount measure for policy purposes as it has several confusing and undesirable properties. This will be illustrated using two theoretical examples below:

1) If we generate 100,000 random incomes between 0 and 100 and set the poverty line at 50, then the poverty rate (H) will be 0.5 (i.e. 50% of the people will be poor) and the poverty gap index (I) will be 0.5. Thus the adjusted headcount ($H*I$) will be $0.5 * 0.5 = 0.25$

2) If the policy makers then adopt a progressive 'low hanging fruit' anti-poverty policy and tax the 'rich' and target these funds to increase the incomes of the 5% of people closest to the poverty line to just above the poverty line (there are many examples of such policies such as in-work benefits, etc.) – then the poverty rate will fall by 5% to 0.45. By contrast the Poverty Gap Index will increase to 0.55. Thus the adjusted headcount ($H*I$) will be $0.45 * 0.55 = 0.25$ i.e. despite the fact that poverty has fallen by 10% (i.e. a fall from 50% to 45% in the poverty rate represents a 10% fall in the poverty rate) and no poor person has seen a fall in their income the MPI adjusted headcount index does not change.

This is a highly undesirable message to give to policy makers as it give the entirely false impression that their anti-poverty policy has failed.

This policy problem with the MPI is not a result of the particular poverty threshold value I have chosen in the example above – it is a general problem with the adjusted headcount measure ($H * I$). Thus:

3) If we generate 100,000 random incomes between 0 and 100 and set the poverty line at 20, then the poverty rate (H) will be 0.2 (i.e. 20% of the people will be poor) and the poverty gap index (I) will be 0.5. Thus the adjusted headcount ($H*I$) will be $0.2 * 0.5 = 0.1$

4) If the policy makers then adopt a progressive 'low hanging fruit' anti-poverty policy and tax the 'rich' and target the income raised to increase the incomes of the 5% of people closest to the poverty line to just above the poverty line – then the poverty rate will fall by 5% to 0.15. By contrast the Poverty Gap Index will increase to 0.64. Thus the adjusted headcount ($H*I$) will be $0.15 * 0.64 = 0.1$ i.e. despite the fact that the poverty has fallen by 25% (i.e. a fall from 20% to 15% in the poverty rate represents a 25% fall in the poverty rate) and no poor person has seen a fall in their income the MPI adjusted headcount index does not change.

Conclusion

The Global MPI measure is likely to be highly unreliable in many countries and the adjusted headcount measure is likely to give misleading results to policy makers and the public about the effectiveness of anti-poverty policies..