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TOWARDS BETTER MEASUREMENT OF POVERTY AND INEQUALITY IN ARAB COUNTRIES: A PROPOSED PAN-ARAB MULTI-PURPOSE SURVEY

Summary

ESCWA plans to implement this methodology in the Pan-Arab Multi Purpose Survey (PAMS) serving analytical studies undertaken by various ESCWA subprogrammes. This document presents a draft version of the Technical Paper. It is being made available to members of the Statistical Committee as a conference room paper for seeking their views and comments. It provides a description of the methodology and the approach to be adopted by ESCWA for PAMS.

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TOWARDS BETTER MEASUREMENT OF POVERTY AND INEQUALITY IN ARAB COUNTRIES: A PROPOSED PAN-ARAB MULTI-PURPOSE SURVEY

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Abstract

The paper assesses the challenges in arriving at estimates of poverty and inequality that are nationally representative and are comparable across countries, particularly in the Arab region. While global fixed poverty line is highly sensitive to money-metric poverty estimates in the region, the global multi-dimensional poverty measure fails to capture regional specificities of most Arab countries. For practical purposes, the countries in the region have come up with their own poverty lines, and estimates, to inform national plans and programmes. However, these poverty lines may often be influenced by country-specific situations, and even political considerations, which limit their comparability across countries.

Examining these limitations from a regionally comparative perspective, the paper argues for an application of uniform approach in measurement. This is extremely important at this particular period in time because the Arab region is poised for greater regional integration and also holds a common regional perspective towards articulation of the sustainable development goals (SDGs)/post-2015 development goals and targets. However, application of a uniform method alone will not solve the problem. The greater challenge in the region is the heterogeneity in data generation mechanisms. Further, there is no particular survey that combines indicators of money-metric and non-income dimensions which is crucial for assessing multi-dimensional poverty in the region.

In this context, the paper proposes a pan Arab Multi-Purpose Survey (PAMPS) that can lead to harmonized money metric poverty measurement, computation of money metric and multi-dimensional poverty for the same households and can serve as an effective tool to monitor the progress of many of the proposed SDGs/post-2015 development indicators related to human poverty. The region already has a good base for implementing similar cross-country surveys so there is much experience, particularly at the League of Arab States (LAS), to build on. A survey questionnaire is proposed, which is adapted from that of the global questionnaire of the Oxford Poverty and Human Development Initiative (OPHI) and Multi-dimensional Poverty Peer Network (MPPN) and expanded as well as adjusted for the Arab region. The questionnaire combines the money-metric and non-income aspects of household welfare, with some choices of application of the modules as decided by the national authorities. If the PAMPS is applied in Arab countries, that will see a new era of data generation in the region.

CONTENTS

Introduction[*]

The Arab region is widely diverse in terms of economic situation of countries but they share common social and cultural characteristics. Therefore, there is significant opportunity for regional economic integration. According to a recent ESCWA study, Arab countries, enhancing economic integration could result in absorbing the labor force surplus, enhancing the competitiveness, and the elimination of some of the structural problems that impede the production and trade flows, such as poor funding and transport networks, as well as differences in specifications and other problems (ESCWA 2013). There is already momentum towards a common Arab market and common customs union. Logically, a pan-Arab approach in obtaining social and economic data will be crucial for improving comparability of data across countries in the region.

A pan-Arab multi-purpose survey makes even more sense while Arab countries are setting out the post-2015 development priorities, goals and targets, which lays greater emphasis on a common regional perspective and multi-dimensional wellbeing of human beings (ESCWA 2014, LAS 2014). In this context, comparability of data across countries and assessment of multiple dimensions of quality of life, including income and non-income aspects of well-being and deprivation, are critical for monitoring development achievements from a regional perspective. Ideally, such an exercise should be performed by using relevant indicators from one household survey which combines both consumption expenditure and other aspects of quality of life. Arab countries, unfortunately, do not have such household surveys. Existing surveys in these countries produce information separately each for household expenditure, employment and labour force, health and other aspects, each with different sampling framework. Further, many of the surveys across countries, except the expenditure surveys, are not available in regular intervals. Combining data from these surveys is statistically inaccurate as the respondent household is not the same across surveys at any given point in time. A pan-Arab approach will, therefore, require standardizing survey concepts and definitions, standardizing data collection methods, synchronizing the survey dates and so on with an aim to minimize variation in sampling error across the surveys.

Standardizing indicators and calculation methods is another aspect of a pan-Arab approach for cross-country comparison and also required for estimating regional aggregates for the region. As of now, national poverty measurement methods vary across countries, while relevance of global extreme poverty line is questionable in many countries within as well as outside the Arab region. Global community has largely accepted the measure of less than $1.25 in purchasing power parity (PPP), particularly after the inception of MDG 1 which targets to halve global poverty by 2015 from that in 1990. But this threshold has been challenged across different countries in different regions, such as in Latin America and in the Arab region, because of the deficits in capturing poverty in terms of 'one line fits all' approach (Ferriera et al 2013; Abu-Ismail et al 2011). While Arab countries rely upon their nationally defined poverty lines for informing planning and policy within the country, these poverty lines may often be influenced by country-specific situations, and even political considerations. The countries neither follow an uniform method in defining poverty line or the composition of minimum needs basket, nor their household expenditure surveys follow similar sampling framework (El Laithy 2013; Ali n.d.). Therefore, there are severe challenges in combining nationally defined poverty estimates for regionally identical poverty estimates unless the estimates are based on a pan-Arab survey and apply comparable methods of measurement.

In this paper we aim to overcome these difficulties by proposing a Pan Arab Multi-Purpose Survey. To justify the need for such a survey, we assess the main poverty and inequality indicators for the Arab countries in the first part. Methodological challenges related to poverty measurement are also discussed in some detail in this part. The second part of the paper argues on the basis of the various challenges confronting poverty monitoring in region that there is a need for a Pan-Arab multi-purpose household survey

that is focused on poverty and inequality measurement in the Arab countries but which can also be deployed for measuring the SGDs in the post-2015 context. A proposed pan-Arab multi-purpose survey discusses the modules and institutional arrangements. The proposed survey builds on the most recent draft of a forthcoming proposal by Oxford Poverty and Human Development Initiative (OPHDI) and Multi-dimensional Poverty Peer Network (MPPN) for a light survey and adapts it by adding a module on household expenditure to allow the computation of money metric poverty indicators. In addition, the proposed questionnaire provides expanded modules designed to meet the demands of a more in depth analysis of economic and social welfare indicators on various issues such as employment, health, education, food security, nutrition, housing and expenditure.

I. ISSUES IN MEASURING POVERTY AND INEQUALITY IN ARAB COUNTRIES

Global poverty measurement has relied upon $1.25 in purchasing power parity (PPP) as a reference threshold to measure poverty across nations in the world, which is considered as measuring the problem in a 'welfare consistent' approach (Ravallion 1992). The PPP represents comparable income (expenditure) across nations to purchase a certain minimum needs (World Bank 2013). In other words, people earning (or spending) less than $1.25 PPP are those who are unable to meet the basic needs for survival in monetary terms anywhere in the world, which draws upon the concept of Sen's (1979) 'absolute poverty'. Does the $1.25 PPP line meaningfully compare poverty across countries? Or Does the $PPP based poverty line meaningfully represent poverty at the national level, taking into account specificities? The answer to the above questions have remained contentious among scholars,[1] however, the purpose here is to examine their fairness in poverty measurement across the Arab countries from a regional perspective.

The countries are diversified and so also their price structure, their context, culture of consumption, biological requirements and so on. A poverty line of $1.25,[2] which is based on peoples' needs in 15 poorest countries in the world, converted to PPP, doesn't adequately take into account levels of living in middle income countries, and the PPP conversions are often unreliable in comparing prevailing price levels across countries (Deaton 2008). Therefore, many countries have deviated from using the $1.25 PPP in their national policy making, and they have rather relied upon their own national poverty lines. As a consequence, poverty differs by switching from $1.25 to national poverty lines; the bigger the divergence between the two lines, the larger is the gap in estimates of poverty for the countries as well as the respective regions – the Arab region being an example of the latter case where poverty, measured by $1.25, was 4 per cent in 2011as against 23.4 per cent, measured by aggregate national estimates (UN and LAS 2013). Through the lens of national poverty estimates, the challenge of meeting MDG1 is much greater than that by the $1.25 a day. How do the Arab countries fair in setting their national poverty lines that can meaningfully compare poverty across countries? While these estimates may be more representative of the country situation, they do have challenges of comparability across countries due to country specific effects including methodological application such as the composition of minimum needs basket as well as variability of survey data and the size of sampling errors in surveys (Ali n.d.). Therefore, comparability of the national poverty lines within the region is a central issue to be tackled while assessing regional poverty in the context of monitoring any Arab post-2015 development agenda.

The non-income manifestations of poverty, such as deprivation from a decent standard of living, social exclusion, decent employment and conditions that deprive a person from achieving its full capability and functioning, can't be ignored as income alone is not sufficient enough to translate into better wellbeing and human development across societies (Sen, 1985). Building upon the lessons learned from the MDGs paradigm, the discussions on post-2015 global development agenda are seriously considering a development agenda that focuses on bolstering multi-dimensional well-being and reducing multi-dimensional poverty, going beyond achievements in income or GDP levels. There have been efforts in measuring multi-

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[1] See Deaton 2008; Reddy 2009.

[2] The initial threshold was $1 per day. See Ravallion 2008; Ravallion 1992.

dimensional poverty at the global levels, such as the multi-dimensional poverty index (MPI), although there is no consensus on any unique measure that can be applied to all countries in the world (Alkire and Foster, 2011). The MPI itself is questionable in middle income countries as the indicators of MPI are tailored to capture poverty mainly in the poorest countries of the world. However, we focus on whether the statistical systems in the Arab countries can rise up to the challenge to provide statistics for meaningful measurement of poverty, taking into account its multiple manifestations.

Another aspect of data which is important to this discussion is to understand interpersonal inequality, whether in income or in other development achievements. Unfortunately, the available knowledge on inequality is not adequate to help contribute in a meaningful way to the discussions about the current critical issues confronting policy making. Given glaring disparities in GDP per capita and household final consumption expenditures,[3] concentration of wealth among few, and occurrence of conflicts and political instabilities in many Arab countries, a significant rise in inequality is expected (UN and LAS, 2013). However, household expenditure data suggests that the Gini coefficient is moderate and stagnant over decades. How does that fair against the region-wide popular discontent since the 2010s with demand for social justice being the heart of the issue? Several studies have attempted examining inequality trends in the Arab region, including Gadir (2003), Bibi and Nabli (2010), Hlasney and Verme (2013), Alvaredo and Picketty (2014), among others, but there is hardly any consensus on inequality trends and all have pointed to the challenges from access to data as well as quality of data in assessing inequality in the region. Alvaredo and Picketty (2014) argued that high income inequality among the countries in the region might be one reason of popular discontent, and not only interpersonal inequality within country. Nevertheless, the question remains is how statistics on inequality can reflect the real life situations in several countries where people continue to demand for social justice and political freedom.

<div align="center">MEASURING MULTIDIMENSIONAL POVERTY</div>

Poverty goes beyond just the income dimension. The non-income manifestations of poverty include hunger and undernourishment, which are increasingly prevalent in the region. The number of people living on less than the minimum level of dietary energy consumption rose from 13.9 per cent in 1991 to 15.3 per cent in 2011. On an aggregate level this represents some 50 million people who are currently undernourished in the region (increasing from 30 million in 1991). The LDCs constitute the majority of the undernourished people, however, it is also increasing in the MICs.

The percentage of children underweight increased from around 14.5 per cent in 1990s to around 15.3 per cent in 2010, mainly due to steep increase in LDCs. Again, in the LDCs, 35 per cent of children (more than one in three children) are underweight in 2010 as compared to 31 per cent in 1990. In the region, a quarter of children under age 5 are stunted in 2010 (UN and LAS 2013). The LDCs and Mashreq sub-regions show increasing child stunting between 1990 and 2010. These outcomes indicate multiple deprivations faced by children as well as mothers in the areas of access to food, clean water and sanitation as well as maternal education.

Global discussions to establish and monitor a pluralistic measure of poverty in any post-2015 agenda suggest that policy making processes at national and global level have started recognizing the importance of meeting the challenge of poverty in all its different manifestations. Social welfare approaches have traditionally considered a plurality of indicators to describe the quality of life of individuals and households, which goes beyond the income-based poverty measure (Sen 1976; Streeten 1981, Townsend 1985). However, a more complete and comprehensive conceptual thinking to understand and empirically measure multi-dimensional poverty is explained by the capability and functioning framework propounded by the noble laureate Amartya Sen (1985). Sen explains that functioning deals with what a person can *do* and capabilities indicate a person's freedom with respect to functioning or what a person can *be* in life.

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[3] Income measured by GDP per capita increased at an average of 2 per cent annually in Arab countries during the 1990s and 2000s, while per capita growth of household final consumption expenditure was only 1.3 per cent. See UN and LAS Arab MDG Report 2013.

Therefore, poverty is regarded as a problem of capability failure. Measuring such a concept holistically is difficult as the indicators include both quantitative and qualitative aspects of human life such as the joy of choices, opportunities and others which are most basic to human development such as literacy and life expectancy. A measure of poverty that takes into account these aspects can paint quite different pictures of the poverty situation, than income poverty, in any given country (Alkire 2002).

The human poverty index (HPI 1 and HPI 2), produced by UNDP (1997), provided measures of multi-dimensional aspects of poverty or deprivation for a large number of countries in the world. The construction of HPI combines life expectancy, education and health. Unlike the popularity of the human development index (HDI), which combines income, health and education dimensions, and applies simple weighting mechanism for aggregation of the three dimensions, the HPI was far less successful in gaining attention of countries for policy dialogues. It also received severe criticism because of the arbitrary weighting scheme in aggregation of the index and leaving out income dimension completely (Booysen, 2002). In 2010, UNDP substituted the HPI measures with a new multi-dimensional poverty index (MPI), which was constructed by Oxford Poverty and Human Development Initiative (OPHI) (Alkire and Foster 2011; Alkire and Santos 2010). The MPI takes into account deprivation in health, education and living standard aspects – the same three dimensions of HDI, but instead of income it measures basic standards of living of households which are a set of indicators that income can buy. The MPI has successfully highlighted the gap between achievements in income-based poverty and the multi-dimensional poverty even in countries that are doing well in terms of growth of income, such as in case of Egypt and Morocco among the Arab countries (UNDP 2010). Since its inception, the MPI has caught attention of many countries globally as a policy tool, especially as it is based on similar conceptual foundations of human development and it relies on simple weighting scheme for aggregation of the index.

The global multi-dimensional poverty index (MPI), based on 10 indicators in three dimensions such as education, health and standard of living, provides results for the Arab countries (figure I) that is hardly capturing such deprivations that the countries in this region are suffering from. For example, for Egypt and Tunisia, the 2013 report indicated that MPI poor is only at 6 per cent and 2.8 per cent respectively (UNDP 2013)[4]. Such low MPI is highly questionable given the situation in these countries. Abu-Ismail et al 2011 argued that the use of the standard global MPI is of limited relevance for the Arab countries. The methodology of MPI is designed mainly to capture extreme poverty, which is more applicable to LDCs. However, the estimation of multi-dimensional poverty is a worthy exercise since it overcomes many of the shortcomings of the indirect money-metric poverty measurement approach. The task ahead for Arab countries therefore is to tailor the MPI to suit development circumstances of the region.

Figure I. Global multi-dimensional poverty index
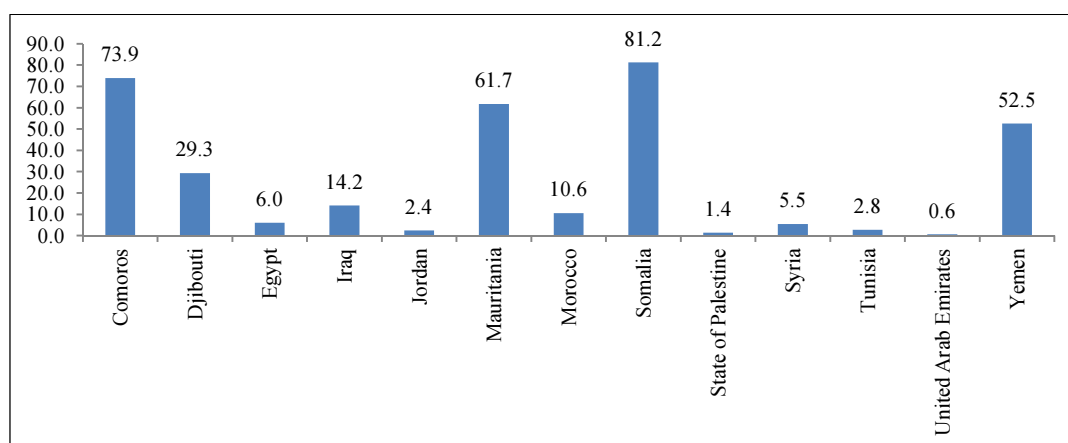
Source: Based on UNDP 2013.

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[4] The reported calculations are based on 2008 data for Egypt and 2003 survey data for Tunisia (UNDP 2013).

An adjusted multi-dimensional deprivation index for some Arab countries, based on some indicators of the global MPI but derived from household expenditure survey data, indicates a stark contrast to the results of the standard global MPI (Abu-Ismail and Sarangi 2013).[5] For example, in Egypt, the incidence of multi-dimensional deprivation turns out to be 16.7 per cent, which is much higher than the 6 per cent poverty noted by the global MPI. This simple exercise suggests a need for re-examining the construction of multi-dimensional poverty index, with a specific focus on elements that could highlight deprivation in middle-income countries.

The existing dimensions and indicators in the global MPI lack representation of issues such as decent jobs, impact of long standing occupation on standard of living of Palestinian people, social protection and levels of living of middle class, which are extremely crucial for assessing household welfare in Arab countries. A recent study on MPI in the Arab region suggests including unemployment dimension into the global MPI for improving the results for the Arab countries (Nawar 2013). Several countries in the region, such as Syria and Yemen, are facing crisis situations, but there is a lack of recent survey data, which could show the impact of the crises on income or multi-dimensional poverty. However, conflicts and distressed economic situation in these countries have contributed to the bulk of the increase in poverty and also those more vulnerable to poverty among the lower middle class population. The challenges faced by children, mothers, youth and elderly are evident during conflict situations and revolutions and are not captured by the existing MPI. Therefore, there is need for a discussion on more context-specific approaches to measuring multi-dimensional poverty in the Arab region that would provide more accurate data and be more relevant for informing policy.

The on-going global and regional discussion on the successor of the MDGs framework, the post-2015 agenda or the sustainable development goals, focuses on multi-dimensional wellbeing rather than just concentrating on reducing income poverty. Income growth should be accompanied by quality education, good health and a decent standard of living along with socio-political empowerment, jointly leading to a higher quality of lives. People and countries today have higher aspirations than they did decades ago when the MDGs were adopted as a set of quantitative goals to be achieved for meeting basic needs. Taking these discussions and a possible future course of action into account, the rethinking of the multi-dimensional poverty in a way that would enable it to be used as a tool for anchoring any agenda for the post-2015 goals and targets is crucial for the Arab region. Some countries, such as Mexico and Columbia,[6] have already adopted multi-dimensional poverty as the basis for their policy formulation and monitoring with regard to development outcomes. There are also many countries around the world that are tailoring the global MPI to their national context to be better able to capture poverty and thus inform national and regional policy. Arab countries are also moving towards rethinking the measurement of multi-dimensional poverty by taking into account additional dimensions as well as relevant indicators and their threshold levels appropriate for meaningful measurement of household welfare (ESCWA 2014).[7]

While measurement of multi-dimensional poverty is to be dealt with carefully, the prime necessity is satisfying the data needs for calculation of MPI in a manner that they remain comparable across the countries. Currently, there are several challenges of comparability of household surveys in addition to the fact that there is no survey that provides a comprehensive list of indicators combining income and non-income aspects of welfare to construct the MPI. For this reason, harmonization of data generation and measurement from a pan-Arab perspective is imminent, which is discussed in the next part.

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[5] See Abu-Ismail and Sarangi 2013 for description of indexing exercise. This exercise applies the methodology to the entire population at the aggregate level as well as to different social classes such as the poor, vulnerable, middle class and affluent.

[6] See the presentation slides by Adriana Conconi, OPHI

[7] ESCWA methodology paper on MPI 2014 (forthcoming).

II. HARMONIZING DATA AND MEASUREMENT: A PAN-ARAB PERSPECTIVE

A. RATIONALE AND CONTEXT

(a)   *Harmonizing money metric poverty measurement*

The first justification is that the Arab region needs to significantly improve and harmonize its measurement of money metric poverty. Of course, if the World Bank's international poverty line provided a good approximation of the value of the national poverty lines in most developing countries, there would not be any need to do this. In fact, there are good reasons why we should refrain from using any fixed threshold to measure welfare. The $1.25 a day line, for example, does not represent the actual deprivation in many countries, especially in Arab countries.[8] This however, is not the case for the poorest countries in the world, where the $1.25 line does serve as a good proxy for national poverty rates, which is expected since the line itself is estimated based on national poverty lines of 15 poorest countries (Chen and Ravallion 2008).

One major flaw in 'fixing the line' is the reliance on purchasing power parity (PPP) exchange rates, which, for a variety of reasons, do not show appropriate adjustment of purchasing power across countries. Deaton (2010) argued that the use of PPP rates for comparison between widely different countries rests on weak theoretical foundations (Deaton 2010, Sen 1973, 1976).[9] He also argued that the international comparison programmes (ICPs) that determine the PPP rates also suffer from other problems, such as the treatment of housing, the productivity rates of government services, the urban bias in pricing, and the usefulness of ICPs. According to Reddy (2009) "the issue goes beyond that of the choice of base year and concerns the question of whether the commodities for which relative prices are being collected are receiving weights which are appropriate when overall PPPs based on these prices are calculated" (Reddy 2009). Challenging the fundamental issues in using PPP rates, Deaton (2010) proposed the use of "self-reported prices from international monitoring surveys, and for a global poverty line that is truly denominated in US dollars." In fact, he himself used self-reported prices from the expenditure surveys for estimating poverty in India as well as across different regions within the country (Deaton 2008).

If PPPs have major flaws, then any international fixed line obviously provides biased estimates of the poor. For example, the equivalent of $1.25 in 2005 PPP in today's Egyptian currency is below the value of the national food poverty line. However, for the poorest African countries, it will roughly approximate the value of the national poverty line which includes basic food and non-food expenditure.

A more sensible approach, however, would relate the poverty line to changes in the standard of living between countries. It should be based on well-established relationships between national poverty lines and average per capita expenditure (in 2005 PPP) across all developing countries (Abu-Ismail et al 2012). Further, an uniform approach in determining reference food basket; treatment of household members taking into account gender, age and location factors; and method of determining allowance for non-food expenditure are all crucial in setting poverty line from a regional comparative perspective. In addition, measuring consumption expenditure itself needs to be harmonized across countries. For example, in a number of countries such as Jordan, Lebanon, Syria and Yemen, expenditure on long lasting durable goods and cars are excluded from total consumption expenditure, while in Egypt all expenditure are counted (annex, table A1).

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[8]   Also it understates poverty in Latin America and the Caribbean (See Ferriera et al. 2013).

[9]   Deaton (2010) quotes Richard Stone (1949): "Why do we want to compare the United States with, say, India or China? What possible interest is there in it? Everybody knows that one country is, in economic terms, very rich and another country very poor; does it matter whether the factor is thirty or fifty or what?" Also see Amartya Sen (1973, 1976) – Sen has suggested not to try to make complete orderings between countries, let alone compute the ratio-scale real income numbers on which poverty and inequality comparisons rest.

Differences in consumption expenditure also occur due to variation in data collection frequency across countries: in Jordan, expenditure data for the same household are collected twice a year taking into account seasonality but in many other countries it is collected once. Similarly, variation in decisions on computing certain items of expenditure such as purchased value vs household produced items and imputed rent for the owner occupied household as are also sources of differences in consumption expenditures in the Arab countries.[10] Therefore, an uniform approach of poverty measurement also requires an uniform pan-Arab measurement of consumption expenditure.

(b)   *Computing money metric and multi-dimensional poverty for the same households*

Notwithstanding the importance of monitoring consumption based poverty, a pluralistic measure of poverty that takes into account both money metric and multi-dimensional aspects of deprivation, including the diversity in Arab countries, is essential in order to inform meaningful policy interventions to address the poverty challenge. The measure(s) should also follow standards that are comparable across the Arab countries in order for regional-sub-regional aggregation. In other words, application of an unified multi-purpose survey across Arab countries is essential.

The need for a suitable multi-dimensional measure that captures more comprehensive dimensions of human wellbeing, not just income, is more pronounced in the context of anchoring a post-2015 agenda for development, which to some extent builds upon the lessons learned from the MDGs. Globally, despite significant reduction in income poverty, there has not been corresponding improvement in nutrition, health and mortality indicators. Evidence from the Arab region shows rising income is not always translating into poverty reduction and increasing well-being such as in Egypt (El Laithy et al 2013; Abu-Ismail and Sarangi 2013). Further, the countries in the region that have done fairly well in achieving progress on many MDGs indicators are struggling from political instabilities as a result of citizens' demand for social justice, which indicates the deficits in measuring wellbeing in the MDGs framework.

A pluralistic assessment of poverty seeks achievements on both income and non-income dimensions that contribute to improve human capabilities and functioning.[11] Given the current practices as well as existent technical and institutional capacity in most Arab countries, design and implementation of such measurement is extremely difficult. On the positive side, there are various household surveys in the region that provide information on different aspects of household welfare, most important among them is the Pan Arab Project for Family Health (PAPFAM) surveys that include indicators on housing conditions, health and nutrition, employment and unemployment, and a number of aspects that affect quality of life and these surveys cover a large number of Arab countries; the second most important set of information are the expenditure surveys conducted by most Arab countries in the region that provide information on household consumption expenditure on various commodities and services, and sources of earning. However, they are two different surveys having different sampling framework and they can't be combined, in their given way as they are, in order to construct the desired MPI for a person or household.

Combining the two sources of information and canvassing the surveys with one sampling framework can be a first step which will be able to indicate income as well as non-income achievements of the same individuals and households. One such good example of combining income and non-income indicators of household surveys is shown by Mexico. The Mexican Family Life Survey (MxFLS) is a longitudinal, multi-thematic survey representative of the Mexican population at the national, urban, rural and regional level,[12]

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[10]   See Annex table A1 for details of inconsistency in consumption surveys and poverty estimates across Arab countries.

[11]   The conceptual foundations of a multi-dimensional indicator or index of development achievement originated from the capability and functioning approach of Sen (1985). Health, longevity, knowledge and education, social relations, subjective feelings are constitutive elements of human life that should not be ignored if we are interested in assessing of the people's standard of living. Accounting for plurality of human life has also been widely advocated by the sociological literature such as Townsend (1985) or, for the Scandinavian Welfare approach, the contributions of Erikson (1987, 1993), Aberg (1987) and Allardt (1993).

[12]   See Mexican Family Life Survey: http://www.ennvih-mxfls.org/english/index.html

that has collected data in three rounds since 2002. Similarly other countries such as Nepal and Uganda National Household Survey (2012-2013) have also put forward combined multi-purpose surveys to collect data on expenditure, employment, and other dimensions of household wellbeing that can help construct money metric and multi-dimensional wellbeing for the same household.

(c)   *Deficits in existing Arab cross-country household surveys*

Most Arab countries have good national statistical systems to produce national accounts data as well as household survey data. Many of them conduct household expenditure surveys in periodic intervals that provide data for money-metric poverty measures. But these surveys are exclusively used for expenditure based measures, and do not capture health and standard of living indicators of households, in addition to other methodological limitations we discussed above. The expenditure surveys alone therefore are not suitable for analyzing multi-dimensional wellbeing of households.

For assessing health and standard of living, many Arab countries prepare national surveys modeled on the Demographic and Health Surveys (DHS). The survey of the Arab Child Development (PAPCHILD) was conducted with the same pattern in the early nineties for six Arab countries, three of them fall in the ESCWA region, by an initiative of the League of Arab States. These countries are Egypt (in 1991), Syria (in 1993) and Yemen (in 1991\92). This experience has been completed with the Pan Arab Project for Family Health (PAPFAM). In addition to the two sets of surveys, UNICEF conducts its Multiple Indicators Cluster Survey (MICS) periodically in several Arab countries.

Although MICS, PAPFAM and DHS are the three major cross-country surveys on health and living standard in the Arab region (Box 3), these surveys are not geared towards a comprehensive measurement of multi-dimensional poverty and do not include information on welfare indicators such as decent employment, social security benefits, household expenditure, food security and so on which are major concerns of household wellbeing in the Arab countries. Further, each survey has a different sampling frame. The surveys are not available for most countries in the region and also they are not carried out in regular intervals. To overcome these difficulties and in order for measuring poverty and inequality in its various forms to inform policy, a Pan-Arab multi-purpose survey methodology that includes elements of both income as well as non-income dimensions is therefore essential.

B. PAN-ARAB MULTI-PURPOSE SURVEY (PAMPS)

(a)   *Building on good practices from the region and global cross-country surveys*

On the bright side, there is a solid foundation in most Arab countries to initiate the pan-Arab Multi-purpose Surveys (PAMPS). So there is no need to "start from scratch". The PAPFAM initiative, by the Department of Statistics and Databases of the Secretariat of the League of Arab States, is an effort to put in strong foundation towards achieving an integrated methodology for social data and indicators, in an aim eventually to build a unified system of development in the Arab countries. The Department of Statistics and Databases has formed a working group to standardize methodologies, definitions and terminology used in the census and household surveys and records of population in several countries including Jordan, Tunisia, Palestine, Egypt, and Yemen.[13] The PAPFAM is a good example for collecting health and standard of living data and produces most likely comparable databases across countries in the region. Extending the scope of PAPFAM to include income and expenditure as well as education and employment as well as regularizing the survey periods can help generating a very useful database for construction of multi-dimensional poverty.

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[13] To achieve this goal four workshops have been held for professionals and experts in the implementation of censuses and surveys named "The unification of methodologies, definitions and terminology used in the census and household surveys and records of population" during 2005, 2006, 2007, and 2008.

Given the importance of the upcoming SDGs/post-2015 agenda, a multi-purpose survey should not only focus on measuring multi-dimensional poverty (and inequality) indicators, but also should assess multi-dimensional wellbeing on several fronts of the SDGs, particularly those related to household welfare. Therefore, regional good practices can be strengthened by combining them with global initiatives for generating data for the SDGs/post-2015 development indicators. That will not only help improving quality of database but also will be cost-effective.

At the global level, a Light and Powerful Survey has been proposed by the OPHDI and the MPPN to monitor the progress of the SDGs focusing on multi-dimensional wellbeing.[14] It is understandable that a full survey of the SDGs will be a humungous task and will be extremely expensive. A light survey can capture the critical indicators of wellbeing and therefore can be a powerful assessment tool. The light survey questionnaire "reflects the technical, cultural, and political insights of MPPN members, and was deemed to be feasible and informative across a wide range of country contexts" (MPPN and OPHDI, 2014). Another advantage of this survey is that it is short enough to monitor main indicators related to multi-dimensional poverty and SDGs and flexible enough to add additional modules that reflect national priorities as well as the emerging priorities of the post-2015 process.

As noted by the OPHI, the questionnaire of the light survey is not perfect and it includes only a subset of the Open Working Group (OWG) outcome indicators related to human poverty. However "there is a trade-off between a perfect survey and a light but powerful survey that can be regularly implemented at large scale, can give an indication of the direction of change of key interconnected deprivations, and allows space for country-selected modules." Later in this section we show how this survey can be supplemented by adding other modules that probe in greater depth topics like child well-being, housing conditions, quality of education, employment, food security, and income/expenditure with a focus on Arab region.

(b)   *Scope of the PAMPS Questionnaires*

This paper proposes a pan-Arab multi-purpose survey (PAMPS) questionnaire with emphasis on gathering data at the household levels in order to assess critical indicators of human wellbeing in a pluralistic way, with a focus on Arab regional perspective. The regional context of the Survey makes it unique but also challenging, considering wide diversity across countries in terms of economic, social, political as well as environmental features. Notwithstanding their diversities, the Arab countries have commonalities in several aspects as well and more importantly they share a common culture historically.[15] In that respect, the purpose of the Survey is to gather information on those aspects of wellbeing that would be easily quantifiable and comparable across countries.

As said in the above section, adopting global surveys to regional context can help improving quality and cost-effectiveness without compromising critical concerns of the region. What are the critical challenges of the Arab region that the PAMPS should take into account in assessing poverty and inequality in a pluralistic manner? Several reports in the past have presented diagnostics tools. Among them include the first *Arab Development Challenges Report* by the League of Arab States and the United Nations Development Programme (UNDP) that highlighted the serious challenges in the areas of employment, social justice and economic governance.[16] Employment and social protection concerns of Arab people, especially for the educated youth, were further emphasised in the report entitled *Rethinking Economic Growth: Towards Productive and Inclusive Arab Societies.*[17]

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[14] OPHI and MPPN 2014 (questionnaire draft).

[15] ESCWA Regional Integration Report 2014.

[16] See the First Arab Development Challenges Report 2010. Also see Von Arnim et al., 2011.

[17] ILO and UNDP, 2012.

The *Arab Millennium Development Goals Report*[18] highlighted the development shortfalls in the region, including the serious issues of high and increasing food insecurity and gender based violence in the region, and how governance failures hindered achievement of the MDGs. The challenges of low female labour participation, failure of translating educational attainment to decent jobs, high informality in labour market, increasing gap between capacity of youth and women but capped opportunities in the labour market are certain features highlighted in the report on *Arab Middle Class*.[19] The region is also home to countries that are suffering severe crises. In Syria, for example, the on-going conflict has pushed majority of people into income poverty, besides negatively affecting other aspects of human capabilities and functioning. Other countries such as Iraq, Sudan, Yemen, Egypt, and Tunisia are also affected directly or indirectly by the crises. Let alone Palestine that remains a unique example in the world where majority people may not be income poor, but they suffer from the Israeli occupation that continues to constrain their capacities and functioning and undermines their basic rights and dignity. Amidst these challenges, the region is rising to the challenge of anchoring the SDGs or the post-2015 agenda, to this effect the Arab countries are putting forward common regional priorities, goals and targets to be achieved by 2030.

The PAMPS questionnaire takes the above regional diagnostics into consideration in setting the scope of the pan-Arab survey modules, while primarily building upon the global OPHI and MPPN (2014) questionnaire on monitoring the progress of the SDGs focusing on multi-dimensional wellbeing. In doing so, the PAMPS questionnaire draws from several existing standard surveys, particularly the most recent versions of the PAPFAM and DHS questionnaires, the Core Welfare Indicator Questionnaire (CWIQ), the Living Standard Measurement Surveys (LSMS), the Multiple Indicator Cluster Surveys (MICS) and the Household Expenditure Surveys (HES). It also acknowledges that the scope of the questionnaire is not to include all indicators of the Outcome Document of the OWG or the Arab regional priorities and targets, as it will be impossible to capture everything in one survey, but only a subset of the indicators related to poverty and human wellbeing.

The PAMPS contains 4 types of questionnaires – each one for the households, children, women and men – in order to generate key indicators in different aspects of household and human wellbeing[20]. The PAMPS questionnaire would permit analysis by gender, age, marital status, urban/rural, region, ethnicity/ religion, disability, legal status, and migration status, if the sample design permits (table 1). It supports gendered analysis and permits special studies for example on disabilities, physical safety and gender based violence.

TABLE 1. KEY INFORMATION GENERATED BY THE PAMPS QUESTIONNAIRES

Demographic	Employment and social protection
Age (g)	Employment type, employer (main jobs) (g)
Gender	Looking for work (g)
Religion (optional) (g)	Absenteeism (g)
Ethnicity (optional) (g)	Social protection (g)
Relationship to head of Household (g)	Number of Jobs (g)
Contributes to household income (g)	Benefits (g)
Marital Status (g)	Exposure to extreme job conditions (g)
Legal Registration of Birth (g)	Accident/Injury while working (g)
Poverty	**Housing**

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[18] UN and LAS, (2013)

[19] ESCWA Arab Middle Class 2014.

[20] The PAMPS have extended modules than the OPHI and MPPN questionnaires. Under the household questionnaire, module C (food insecurity and food diversity), module E (food and non-food expenditure), and module F (Annual household income) have been added to the PAMPS. The questions in other modules such as household demographic characteristics (module A), dwelling and amenities and assets (module B), and physical safety and violence (module C) are adjusted as relevant for the region. Questionnaires on children, women and men are also adapted to the regional context.

TABLE 1 (*continued*)

Demographic	Employment and Social Protection
Money-metric poverty	Ownership (g)
Multidimensional Poverty index (MPI)	Sleeping Rooms
Gendered Poverty Index (GPI)	Floor materials
Expenditure-based inequality	Roof materials
Nutrition	Wall materials
Food security	**Services**
Food insecurity	Time to schooling
Hunger	Sanitation (type, shared)
Dietary diversity	Energy (cooking and heating fuels)
Health	Ventilation (cooking and heating)
Activity Limitations (g)	Drinking water, time to water, treatment
Disability (g)	Non-drinking water source(s)
Child Malnutrition (height, wt) (g)	Electricity (loadshutting)
Adult Malnutrition (height, wt) (g)	**Assets**
Diabetics and life style related diseases (g)	Mobile phone (g), Fixed telephone
Delivery location	Watch, radio,
If child is in nutrition programme (g)	Refrigerator, television, iron, sewing machine
Child Mortality (g)	Bed or mattress
Age at first pregnancy	Computer
Education	Bicycle, motorcycle, cart, car, motorboat
Literacy (g)	Internet access
Highest level and grade (g)	Bank account
Child Pre-school & School attendance (g)	Small, medium and large livestock (g)
Why not attending (g)	**Crime and Violence**
Quality of School/problems at school	Stealing or destruction of property
	Victim of physical violence (g)
	Fatal incidents
	Gender related violence (g)

Source: Authors' list based on OPHDI and MPPN (2014).

Note: The symbol (g) indicates that the question can be gender disaggregated.

A brief description of the PAMPS questionnaires and modules is given below.

1. **Household questionnaire**: It contains several modules.

- Module A: Household roster. This module includes the characteristics of the households' members such as their age, gender, marital status and other characteristics regarding their education and their health. The module includes a section about mobility, disability and activity limitations. This section was modified from the MPPN survey to correspond the region characteristics, such as the availability of health insurance for the individual, chronic illness such as diabetes and cardiovascular, the reason of these disabilities and the place of treatment.

- Module B: Household characteristics (dwelling, amenities and assets). This module includes the dwelling ownership type, number of rooms, floors and walls 'materials. It describes as well the different facilities available concerning water and sanitation and the availability of electricity and internet. In addition, the module contains questions about the ownership of durable goods and livestock. One question was added about imputed rent for dwelling occupied by their owners. This is a very important question in constructing money welfare aggregate.

- Module C: Food insecurity and food diversity. This module includes questions to the household about the access to food they used to consume and the lack of its consumption of such food for lack of resources. The time period of such questions is about the previous 30 days of the survey. Moreover there questions about the number of days, per week, where the different food groups were consumed. These questions capture the diversity of food consumed by the household.

- Module D: Household physical safety and violence. This module includes questions about attacks faced by the household during the previous year to the survey and if there were injuries or death. Additional questions were added to this module, from the Demographic Health Survey, to capture other sources of violence more relevant to the Arab region.

- Module E: Food and non food expenditure. This module includes questions about the weekly consumption and expenditure of detailed food items, purchased by the household, produced by her or offered to her. In addition to the aggregated Weekly consumption and expenditure on non-food goods and services that are used on daily basis (such as tobacco and fuel) and Expenditure on non-food goods and services during the past month/12 months. This part is important for measuring money metric welfare, constructing poverty lines, food accessibility as well as establishing the relation between monetary and multi-dimensional poverty.

- Module F: Annual household income. This module includes the different sources of income from work, from properties and from transfers, in addition to the estimated values of the rent. It can be used in assessing social government and non-government assistances.

2. **Children's questionnaire** (0-5 years of age):

- The Children Module covers Child health indicators; it includes anthropometric information about all children between 0-5 years old listed in the roster. In addition it includes questions about the place and the person of delivery and if the child had participated in any nutritional program. Additional questions about breast feeding and the different vaccination were added to the MPPN and OPHI survey.

3. **Woman's questionnaire** (15-64 years of age):

- The Women's Module includes women's identification, information about her pregnancy and child birth such as the number of alive and dead children and finally a module about the women's labor during the last three months previous to the survey. This later includes questions such as employment status, employment sector, number of working hours, reasons for not working and if the respondent had any accident or injuries during her work. Additional questions were added about the period of the unemployment and the availability of contract. The contract questions permits to capture the informality status of the respondent given the importance of the informal sector in the Arab region. Some of these questions are about violence against women, such as circumcision and domestic violence against women from a relevant male of her household.

4. **Man's questionnaire** (15-64 years of age):

- The men's module includes the same modules as the Women's one except that the gender-based domestic violence and pregnancy related questions are not part of men's questionnaire.

As the survey has been designed to maximize high quality for low cost, the sampling design must be addressed precisely using the final survey instrument. A working assumption is that it would be representative by urban and rural areas at the national level and include main sub-national geographic units.

As usual, sample size can be increased if greater disaggregation is required and sampling of key omitted groups (slums, the homeless, institutionalized, displaced) is required.

To sum, the PAMPS questionnaire has several advantages. First, money-metric poverty as well as multidimensional poverty and inequality measures can easily be constructed and the survey can help monitoring about 40 indicators of SDGs/post-2015 development agenda outlined in the Outcome Document of the Open Working Group. A basic gendered MPI could be constructed for women and men and children as well. Further, it can allow assessing correlation between money metric and multi-dimensional poverty measures. Second, it does not require extensive training or cost if the PAMPS will be implemented by PAPFAM. Third, it poses low ethical risks to respondents as information is tailored for the Arab countries.

Concluding remarks

There are many challenges in arriving at estimates of poverty and inequality that are nationally representative and are comparable across countries, particularly in the Arab region. The global money-metric poverty methodology of less than 1.25 PPP$, which aims at arriving at comparable estimates of poverty across the globe, has severe limitations in assessing poverty in the Arab region that has been highlighted in a number of earlier studies. A quick snapshot in this paper indicates that the 1.25 PPP$ line is highly sensitive to poverty estimates in the region because by moving along the scale from 1.25 to 2 and 2.75, the regional poverty rate increases from 4 per cent to 19 per cent and 40 per cent respectively. Such a shift is a distinct feature of the Arab region and, therefore, questions the appropriateness of applying 'one line fits all' approach, among others, in arriving at reliable estimates of money-metric poverty.

It is therefore not a surprise that countries in the region have come up with their own poverty lines, and estimates, to inform national plans and programmes. However, these poverty lines may often be influenced by country-specific situations, and even political considerations, which limit their comparability across countries. Given the latest expenditure surveys, we applied a uniform approach, commonly known as the Basic Needs Approach, to construct the lower and upper poverty lines in nine Arab countries to arrive at estimates of the poor and the 'vulnerable'. The results indicate that the poor and the vulnerable groups constituted 21.3 per cent and 19.5 per cent, respectively, in 2011, which is clearly much higher than that obtained by globally fixed poverty line.

However, the purpose of the paper is not to estimate latest poverty rates for the region, which might have gone up significantly considering the latest crises situation in many countries, but to highlight the discrepancies in methods of calculation that can lead to sensitivity in poverty estimates and therefore to argue for an application of uniform approach in measurement, particularly for the Arab region that aims towards greater regional integration and also holds a common regional perspective towards articulation of the sustainable development goals (SDGs)/post-2015 development goals and targets.

Consistency in application of methodology is one aspect of monitoring comparable poverty estimates. But the greater challenge in the region is the heterogeneity in data generation mechanisms. Most Arab countries conduct household surveys that provide indicators for money-metric and non-income dimensions of household welfare, separately, such as the expenditure surveys, MICS, DHS and PAPFAM. But irregularity of the surveys, mismatch between survey periods, mismatching definitions/concepts, different sample size and population representativeness methods are common features of these household surveys. Further, there is no particular survey that combines indicators of money-metric and non-income dimensions which is crucial for assessing multi-dimensional poverty in the region, which is of immense significance as the region is setting its goals and targets for the post-2015 development agenda.

Therefore, there are three main reasons why the Arab region needs a pan Arab Multi-Purpose Survey: First it will lead to harmonized money metric poverty measurement and avoid reliance on PPP based poverty lines which have significant problems. Second, it will allow the computation of money metric and multi-dimensional poverty for the same households, thus significantly enhancing our understanding of both

phenomenon and improving targeting mechanisms. Third, the region already has a good base for implementing similar cross-country surveys so there is much experience, particularly at the LAS, to build on.

The PAMPS aims at providing an accurate and comparable monitoring of both uni-dimensional (money-metric) and multidimensional poverty measures as well as their related inequality indicators. Second, the PAMPS also provides an effective tool to monitor the progress of many of the proposed indicators under the SDGs/post-2015 development agenda in the Outcome Document of the Open Working Group. The PAMPS may be implemented in its basic (light) form as suggested by the OPHDI and MPPN, or in a more expanded form to suit the demands for more specialized and comprehensive monitoring of development indicators. The paper has provided the reader with relevant modules for both options.

As a way forward, to implement the PAMPS, the existing system of national statistics will require some capacity development. In addition, a separate entity should be vested with such responsibility under the umbrella of League of Arab States as the relevant inter-governmental body.[21] These issues related to the appropriate institutional arrangement for the implementation of the PAMPS should be discussed and elaborated further as a follow up to this proposal, should it be acceptable to Arab countries. For example, addressing the above noted deficits in surveying and monitoring may require a devoted and specialized centre of excellence vested with a mandate of pan-Arab survey and research for informing evidence-based development policy. This center could work closely with Arab countries statistics and planning agencies to implement national multi-purpose surveys that are regionally comparable.

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[21] There is already a good example of pan-Arab surveys such as the PAPFAM of the League of Arab States. Upscaling PAPFAM activities in terms of multi-dimensionality of the survey, coverage of countries and their regular implementation is one option but it requires significant capacity development, given the existing capacity constraints of PAPFAM.

Annex

TABLE A1. DIFFERENCES IN SETTING POVERTY LINES AND CONSUMPTION AGGREGATES

Country	Year	The unit of measure poverty line	expenditure on durable goods	Imputed rent	Number of seasons households were visited during the surveyed year	Was price difference between geographical areas were taken into account	reference group for food basket component in poverty line	Is economies of scale were taken into account in estimating poverty line or consumption aggregate	method to estimate non food poverty line
Jordan	2002, 2006, 2008, 2010	consumption per capita; consumption was adjusted to take into account differences in prices by governorates and age and gender composition of household	expenditure on long lasting durable goods and cars were excluded		twice	yes	lowest quintile	Yes and it was assumed that there are 0.92 economies of scale factor for households with more than one person.	parametric, non food poverty line was estimated for a household of six and non food poverty line for each household was estimated as nfline = nfline_6 * [household size/6] (a - 1), a is the parameter of economies of scale. In 2010 survey economies of scale were dropped where nfline_6 was the poverty line for a household of size 6

Country	Year	The unit of measure poverty line	expenditure on durable goods	Imputed rent	Number of seasons households were visited during the surveyed year	Was price difference between geographical areas were taken into account	reference group for food basket component in poverty line	Is economies of scale were taken into account in estimating poverty line or consumption aggregate	method to estimate non food poverty line
Yemen	1998, 2006	household consumption taking into account household size, age and gender composition	expenditure on long lasting durable goods and cars were excluded	estimated using non parametric method	once	yes	lowest two quintiles	Yes, by using econometric model to take household age and gender composition and place of residence into account when estimating household specific poverty line	parametric and household specific poverty line was estimated, thus household age and gender composition and place of residence and economies of scale were taken into account
Egypt	2000, 2005, 2008, 2011	household consumption taking into account household size, age and gender composition	all expenditure were counted	estimated by households who owned/occupied house	once	yes	second quintile	Yes, by using econometric model to take household age and gender composition and place of residence into account when estimating household specific poverty line	parametric and household specific poverty line was estimated, thus household age and gender composition and place of residence and economies of scale were taken into account

Country	Year	The unit of measure poverty line	expenditure on durable goods	Imputed rent	Number of seasons households were visited during the surveyed year	Was price difference between geographical areas were taken into account	reference group for food basket component in poverty line	Is economies of scale were taken into account in estimating poverty line or consumption aggregate	method to estimate non food poverty line
Syria	1997, 2004, 2007, 2009	household consumption taking into account household size, age and gender composition	expenditure on long lasting durable goods and cars were excluded	estimated using non parametric method	twice in 2009 but once in other surveys	yes	second quintile	Yes, by using econometric model to take household age and gender composition and place of residence into account when estimating household specific poverty line	parametric and household specific poverty line was estimated, thus household age and gender composition and place of residence and economies of scale were taken into account
Lebanon	2005	household consumption taking into account household size, age and gender composition	expenditure on long lasting durable goods and cars were excluded but the service generated from using cars were accounted for	estimated using aregression model	once	yes	second quintile	Yes, by using econometric model to take household age and gender composition and place of residence into account when estimating household specific poverty line	parametric and household specific poverty line was estimated, thus household age and gender composition and place of residence and economies of scale were taken into account
Morocco	2010	consumption per capita			once	yes	lowest quintile		parametric

Country	Year	The unit of measure poverty line	expenditure on durable goods	Imputed rent	Number of seasons households were visited during the surveyed year	Was price difference between geographical areas were taken into account	reference group for food basket component in poverty line	Is economies of scale were taken into account in estimating poverty line or consumption aggregate	method to estimate non food poverty line
Tunisia	2003	consumption per capita			once	yes	households that have spent about 200-250 dinars per capita in 1990		
Iraq	2007	consumption of reference household			once	no	second and third deciles	no	non parametric
Palestine		consumption of reference household,taking into accounte conomies of scale in household consumption and differences in household composition, the following adult equivalent conversion factor, C*, is used: C* = (A+0.46C)^0.89w, hereA is the numbero f adultsa nd C is the number of children.			once	yes	lowest quintile	yes	

Country	Year	The unit of measure poverty line	expenditure on durable goods	Imputed rent	Number of seasons households were visited during the surveyed year	Was price difference between geographical areas were taken into account	reference group for food basket component in poverty line	Is economies of scale were taken into account in estimating poverty line or consumption aggregate	method to estimate non food poverty line
Oman	2006-2010	household consumption taking into account household size, age and gender composition			once	yes	as recommended by nutrition experts	Yes, by using econometric model to take household age and gender composition and place of residence into account when estimating household specific poverty line	parametric and household specific poverty line was estimated, thus household age and gender composition and place of residence and economies of scale were taken into account
Qatar	2007	consumption of adult equivalent using AE = 1 + 0.7(Nadults – 1) + 0.5Nchildren where AE is the number of adult equivalents of the household. The 0.7 and 0.5 coefficients reflect also economies of scale,	housing or durable goods, corrections have been made		once	yes	relative poverty line was used		

Country	Year	The unit of measure poverty line	expenditure on durable goods	Imputed rent	Number of seasons households were visited during the surveyed year	Was price difference between geographical areas were taken into account	reference group for food basket component in poverty line	Is economies of scale were taken into account in estimating poverty line or consumption aggregate	method to estimate non food poverty line
Sudan	2007	consumption of adult equivalent using AE = 1 + 0.7(Nadults – 1) + 0.5Nchildren where AE is the number of adult equivalents of the household. The 0.7 and 0.5 coefficients reflect also economies of scale,				Yes	bottom 60% of the population	yes	non parametric

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