



Centre for Analysis
of Social Exclusion



Multidimensional Inequality Framework

Final draft

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8 June 2018

Collaboration between LSE and Oxfam

Supported by: LSE's International Inequalities Institute

Atlantic Visiting Fellows programme

Atlantic Fellows

FOR SOCIAL AND
ECONOMIC EQUITY



International
Inequalities Institute

Background

This research was made possible by support from the Atlantic Fellows in Social and Economic Equity Programme, administered by the International Inequalities Institute of the London School of Economics and Political Science. It seeks to bridge academic, activist and practitioner perspectives with the aim to support Oxfam in their ambition to design and implement relevant, solid and effective programmes for the reduction of inequalities at national and local levels. The Framework is being made widely available so that all seeking to understand and tackle inequalities can benefit.

The main objective of the project was to develop a robust and pragmatic Inequality Framework and a Toolkit to aid analysts, activists and practitioners. The Framework and Toolkit build on the latest academic research on inequality, its measurement and existing frameworks, combined with practitioner, activist and policy expertise held within Oxfam, to produce a theoretically grounded yet practical framework which, supported by a toolkit, allows researchers and practitioners to take a systematic approach to measuring and understanding inequalities, and devising effective inequality reduction programmes and strategies.

This document outlines the Multidimensional Inequality Framework which is theoretically underpinned by Sen's capability approach to evaluating the quality of life.

Acknowledgements: We are very grateful to the many individuals who participated in seminars at the LSE and in Barcelona, to all who responded to the initial consultation on the first draft and all our colleagues in Oxfam (particularly Lara Contreras at Oxfam Intermón), CASE (especially Tania Burchardt) and the III at the LSE who generously gave their time and expertise to aid the development of the Framework.

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Non-technical introduction

The international Multidimensional Inequality Framework provides a systematic approach to measuring and analysing inequalities, and for identifying causes and potential solutions. It has been developed through a collaboration between experts at the London School of Economics and Oxfam.

The Framework is designed to measure inequality in individual well-being, reflecting the fact that our lives have many important dimensions: our health, our relationships, our safety, our ability to have influence, our knowledge, and many other dimensions including financial security. The Framework offers a systematic multidimensional approach to assessing inequality in the quality of individuals' lives.

The Framework draws on Sen's capability approach to provide a clear methodology to assess well-being. It allows us to examine differences in people's capabilities to live the kind of life they have reason to value. The capability approach rejects an exclusive focus on income or subjective well-being, defined the quality of people's lives in terms of a set of valuable things that they can be or do; like being physically secure or having influence over decisions affecting their lives.

Our approach is innovative, marking a departure from the majority of previous instantiations of Sen's capability approach which have tended to focus on capability-deprivation (measuring differences in rates of deprivation between groups) rather than capability-inequality which encompasses advantage as well as disadvantage. The development of a capability-based inequality measurement framework is a natural extension to work already undertaken in this field, offering an innovative approach to understanding and addressing multidimensional inequality.

Table 1: Domains of the Multidimensional Inequality Framework

Domain	Short title	Sub-title
Domain 1	Life and health	Inequality in the capability to be alive and to live a healthy life
Domain 2	Physical and legal security	Inequality in the capability to live in physical safety and legal security
Domain 3	Education and learning	Inequality in the capability to be knowledgeable, to understand and reason, and to have the skills to participate in society
Domain 4	Financial security and dignified work	Inequality in the capability to achieve financial independence and security, enjoy dignified and fair work, and recognition of unpaid work and care
Domain 5	Comfortable, independent and secure living conditions	Inequality in the capability to enjoy comfortable, independent and secure living conditions
Domain 6	Participation, influence and voice	Inequality in the capability to participate in decision-making, have a voice and influence
Domain 7	Individual, family and social life	Inequality in the capability to enjoy individual, family and social life, to express yourself and to have self-respect

Introduction

The international Multidimensional Inequality Framework provides a systematic, theoretically-underpinned instrument for measuring and analysing inequalities, and for identifying causes and potential solutions. This brief introduction sets out the motivation, the context in which the Framework was developed and provides details of its theoretical and conceptual foundations.

The Framework has been developed through a collaboration between experts at the Centre for Analysis of Social Exclusion at the London School of Economics, led by Abigail McKnight, and Oxfam. It is being made available online with tailored toolkits, tutorials, additional resources and the opportunity to contribute to the project.

Understanding inequality

The study of inequality has largely taken place within single dimensions such as income, health and education, reflecting the fact that experts predominately concentrate on a particular discipline and field of study. The majority of discourse on inequality has focused on economic inequality, particularly income inequality, and our knowledge of income inequality has advanced considerably over the last few decades. This has been aided by fairly long time series of income data which are now readily available for a large number of countries. However, even within this narrow discipline it has taken some time to establish a clear picture of the scale of inequality and whether inequality has been increasing or not, within countries, between countries and across the world. This is because the study of inequality is not an exact science combining both positive (establishing the facts) and normative (involving value judgements about fairness) aspects. Normative aspects are influenced by positive aspects through the choice of inequality measures, judgement on the types of inequality we should be concerned about and what constitutes high, low and 'acceptable' levels of inequality.

Recent analysis of the global picture of income inequality trends underlines the importance of being clear about how we understand and measure inequality, as different measures show contrasting trends both in terms of global inequality, and between and within countries (Niño-Zarazña, Roope and Tarp, 2017). This detailed analysis shows that relative global income inequality (measured by, for example, the relative Gini or decile ratios) declined substantially 1975-2010, mainly driven by income growth in China and India, but absolute income inequality (measured by, for example, the standard deviation and the absolute Gini) increased considerably over the same period. In some regions of the world, inequality trends assessed against these two concepts of inequality moved in the same direction (for example, increasing in North America and decreasing in the Middle East and North Africa) but diverged in other regions over the same period (for example, in Latin America and the Caribbean, East Asia and Pacific relative inequality declined but absolute inequality increased). Within regions there is also considerable heterogeneity between countries in income inequality trends even using the same measure. Recent research has shown that although relative income inequality has been on the rise in many rich and middle-income countries over the last three to four decades, the timing and the extent of any increase varied significantly between countries (Salverda et al., 2014; Nolan et al., 2014; OECD, 2008).

This example shows that even when measuring inequality within a single domain there are important differences between measures particularly in terms of how changes in incomes affect inequality estimates. It is therefore worthwhile spending a little time clarifying what forms of inequality different measures capture. Measures can be broadly divided into three classes: relative inequality measures, absolute inequality measures and ‘centrist’ measures. Relative inequality measures show no increase in inequality if everyone’s income increases proportionately by the same amount, for example everyone’s income doubles. However, the absolute difference between people’s incomes will have increased and absolute inequality measures will compute an increase in inequality. In contrast, absolute measures of inequality will show no increase in inequality if everyone’s income increases by a fixed amount, say by \$100. However, relative inequality declines as \$100 increase is a greater proportionate increase for those on a low income than for those on a high income. We might be interested in both forms of inequality and a compromise can be found in so-called ‘centrist measures’ which are sensitive to both types of changes in income (for example, the intermediate Gini or the Krtscha).

Although we are faced with a mixed picture of income inequality trends, evidence suggests that while the use of different measures of inequality can be used selectively to paint a particular picture within some countries, over different time periods or across the world, people express concern and distaste for inequality in all its forms. There is now enough evidence of increasing inequality (be it absolute or relative) to lead to a growing concern about the harmful effects of inequality on societies. A consensus is emerging across a number of high profile international organisations and highly regarded experts that more needs to be done to halt this trend, to ensure that the benefits of future growth are shared more equally and that solutions are found to limit any harmful impact (see, for example, IMF, 2017; World Bank, 2016; OECD, 2015; Atkinson, 2015; Oxfam, 2014; Piketty 2014; Stiglitz, 2012).

Why a framework for measuring multidimensional inequality?

There is a growing recognition that inequality and poverty are better understood as multidimensional concepts. Although an income poverty line remains a useful, short-hand, way of identifying individuals at risk of poverty, an income measure is insufficient to pick up how individuals’ deprivation varies across key aspects of their lives. This has led to the development of multidimensional poverty measures, such as the Global Multidimensional Poverty Index (Alkire and Foster, 2011, see more below), and material deprivation measures (for example, the EU’s measure which picks up the inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life) to complement income-only measures.

When using multidimensional measures, one approach is to simply compute how many people or households are classified as deprived according to thresholds set in each dimension. This approach would lead to a number of poverty estimates unless the same number of individuals were classified as deprived in all dimensions. Alternatively, individuals or households could be classified as suffering from multiple deprivation or material deprivation if they are deprived in a number of dimensions. For example, the EU measures the rate of severe material deprivation as the proportion of people living

in households that cannot afford at least four items from a list of nine items (including not being able to afford to pay housing costs, buy a car, own a telephone, a week's holiday away from home). Another approach is to produce a single index from summing deprivation indicators across a number of domains or measures. The global Multidimensional Poverty Index (MPI), developed by Alkire and Foster at the Oxford Poverty and Human Development Initiative (OPHI), is an example of this approach (Alkire and Foster, 2011). The MPI is designed to capture the deprivations that each person faces at the same time with respect to education, health and living standards (much like the Human Development Index – see below). There are two indicators for education and for health and six for living standards. Each indicator is assigned a weight so that each dimensions is worth one-third in the overall weighting.

These approaches are data intensive as they require access to data sources which collect information across the different dimensions for a representative sample of individuals or households. Indices also require assignment of weights for the different measures included in any index.

The concept that we are interested in is individual well-being which is inherently multidimensional. If we pause momentarily to evaluate the quality of our own lives it is immediately apparent that many dimensions of our lives are important to us: our health, our relationships, our safety, our ability to make decisions on matters that are important to us, our reputation as well as many other dimensions including financial security. The Framework offers a systematic multidimensional approach to assessing inequality in the quality of individuals' lives. For the overall assessment of inequality we are suggesting a dashboard approach. With an extensive and varied selection of measures, careful analysis is required to make an informed assessment of inequality.

Existing multidimensional frameworks

A number of multidimensional social indicator frameworks have been developed in recent years. These include:

- the UN [Human Development Index](#) which summarises average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living;
- the UN [Sustainable Development Goals](#) are supplemented by an indicator framework for measuring and monitoring progress towards reaching the 2030 goals;
- the UK's Office for National Statistics has developed a multidimensional set of indicators for measuring and monitoring [National Well-being](#);
- to monitor the implementation of the [European Pillar of Social Rights](#) progress is measured in 12 areas within three domains through a series of indicators;
- the OECD's [Better Life Index](#) covers 11 topics in the areas of material living conditions and quality of life; and,
- the World Economic Forum has developed an [Inclusive Development Index](#) which contains three pillars and 12 key performance indicators to assess inclusive economic performance.

On the whole these frameworks are not theoretically grounded and have been developed with a specific purpose in mind, which include aspects of poverty and inequality but are not general multidimensional inequality frameworks. Without a strong theoretical foundation any framework can appear to simply comprise an arbitrary list of inequality indicators and measures.

The choice of theoretical and conceptual foundation: the capability approach

The Multidimensional Inequality Framework draws on Sen's capability approach (Sen, 1993) to provide a clear methodology to assess inequalities in individual well-being. This provides a focus on examining differences in people's capabilities to live the kind of life they have reason to value. It is defined in terms of a set of valuable things that people can be or do; like being physically secure or having influence over decisions affecting their lives. It offers a systematic approach to assessing the quality of life we lead and what we can or cannot do, and can or cannot be.

A clear theoretical underpinning facilitates the systematic capture of the complex nature of inequality, which can take many different forms. Our approach is innovative, marking a departure from the majority of previous instantiations of Sen's capability approach which have tended to focus on capability-deprivation (measuring differences in rates of deprivation between groups) rather than capability-inequality which encompasses advantage as well as disadvantage. It also represents an important departure from other inequality frameworks which tend to simply assess outcomes without any consideration of factors that constrain choice. The development of a capability-based inequality measurement framework is a natural extension to work already undertaken in this field, offering a new and innovative approach to understanding and addressing multidimensional inequality.

What do we mean by a capability-based approach?

We believe that a strong theoretical foundation is important for the credibility of the Framework. However, this does not mean that a deep understanding of the theory behind the approach is necessary for its practical application. The Multidimensional Inequality Framework, along with the online step-by-step user guides, have been designed so that the Framework can be used with ease by specialists and non-specialists. For those interested in learning a bit more about the theory behind the conceptual basis here we provide a brief introduction to the approach.

Amartya Sen is a world renowned Indian economist and philosopher. In 1998 he was awarded the [Nobel Prize in Economics](#) for his contribution to welfare economics. In a body of work, Sen outlines the capability approach; an evaluative framework which can be used to assess individual well-being (key references include: Sen, 1979; 1985; 1987; 1992; 1993; 1999). Sen found existing frameworks wanting either due to narrow focus or because of the lack of recognition for what really matters in terms of how individuals evaluate and value the quality of their lives. Instead of focusing exclusively on economic means or subjective well-being, the capability approach focuses on the quality of life that individuals manage to live and the freedom they have to choose the kind of life they have reason to value, in terms of the valuable things they can do or be. For example,

being adequately nourished, being free from avoidable diseases, being able to take part in the life of the community and having self-respect (Sen, 1999, p. 199).

Two key concepts in the capability approach are ‘capabilities’ and ‘functionings’. Sen describes capabilities as “notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead” and defines a functioning as an achievement, whereas a capability is the ability to achieve (Sen, 1987: p.36).

‘Functionings’ are what a person ‘manages to do or be’ (Sen, 1985). While the language of the capability approach can be a bit mystifying for the uninitiated, in simple terms capabilities can be likened to substantive opportunities and functionings to observed outcomes. There is more to each concept, but this offers a useful starting point.

The capability approach calls for a multidimensional approach to understanding individual well-being. It rejects the exclusive focus on subjective measures of well-being (utility) or on economic resources (opulence). Although these approaches are widely used, they are seen to have a number of fundamental weaknesses.

One of the problems associated with exclusively using subjective measures of well-being (happiness or life satisfaction) to assess individual welfare, is that subjective assessments can be affected by expectations and preferences being adapted by experience, and shaped by social and cultural norms. For example, over time people can become accustomed to living on a low income, or being in poor health and, as a result, expectations, and aspirations for, life can be pared back. Similarly, a privileged upbringing can leave people disappointed with what they manage to achieve in their own lives. Sen illustrates the influence of norms using the example of how perceptions of relative needs of different members of the family relate to social influence (for example, a magnification of the needs of a male head of household or underplaying the needs of female household members), and how these perceptions lead to different subjective assessments of, for example, their own health, assessments which conflict with medical evidence (Sen, 1999). It is not that Sen rejects happiness as a valuable aspect of well-being, he simply suggests that if it is considered important it should be included as one of a number of aspects in an assessment of well-being (Sen, 1985).

There are also shortcomings associated with focusing solely on economic resources (opulence) due to the failure to capture how individuals’ needs and non-economic resources differ, affecting individuals’ ability to convert resources into valuable outcomes. Economic resources largely provide a ‘means to an end’ and it is the ‘end’ which we are interested in. “The value of the living standard lies in the living, and not in the possessing of commodities, which has derivate and varying relevance” (Sen, 1987, p.25), and “our success in the material world is often judged by our opulence; but despite that, commodities are not more than means to an end” (Sen, 1987, p.16).

The ability to convert resources and commodities into valuable outcomes can be affected by a range of factors. Conversion can occur at different rates depending on various “conversion factors”. Sen suggests a number of conversion factors which are typically grouped into three main categories. Dang (2014) and Robeyns (2017) provide illustrative examples of conversion factors in each category. These are: (a) *personal conversion factors* (such as personal characteristics: physical and mental aspects (eg

disabilities), age and gender); (b) *social conversion factors* (such as social institutions, social norms (gender, religious, cultural, moral), traditions and the behaviour of others (sexism, homophobia, racism, etc.) and (c) *environmental conversion factors* (including climate, pollution, deforestation, etc.). These factors influence the conversion rate from individual resources into functionings (outcome or achievement) and capabilities (real opportunities or positive freedoms) (Dang, 2014, p.462). Conversion factors and conversion rates have not always been treated systematically in the capability literature but there are interesting and informative attempts to define and measure them (see, for example, Burchardt, forthcoming; Chiappero-Martinetti and Salardi, 2008; Comim, Qizilbash and Alkire, 2001; Brandolini and D'Alessio, 1998). For the purposes of the Framework, conversion factors play an important role in the identification of inequality drivers and candidate policies.

Another aspect is choice. While special importance is given to the actual lifestyle chosen, the availability of other options has value too (Sen, 1992). Sen stresses that it is important to be able to distinguish between outcomes that arise due to lack of choice (limiting capabilities) from those which are chosen (the need to be able to distinguish between choosing not to work from involuntary unemployment); recognising that being an 'author' of your own life has intrinsic value. The most often cited example that Sen describes is the difference between a person choosing to fast on religious grounds and a person who is starving as a result of famine. In each case, measured simply in terms of observed outcomes at a point in time, neither person is receiving nourishment but in the former case, this is a result of choice while in the latter case no choice is available. Ideally we would want to be able to distinguish between these two cases in evaluating individual welfare. Choice is assumed to have intrinsic value where the choice is between valued (and achievable) alternatives. Sen illustrates this through an example where person X enjoys higher welfare when they are given a choice between A and B and choose A, than the case where they had no choice and only A was available; even though in both cases person X ends up with A (Sen, 1992).

The Building Blocks of the Capability Approach

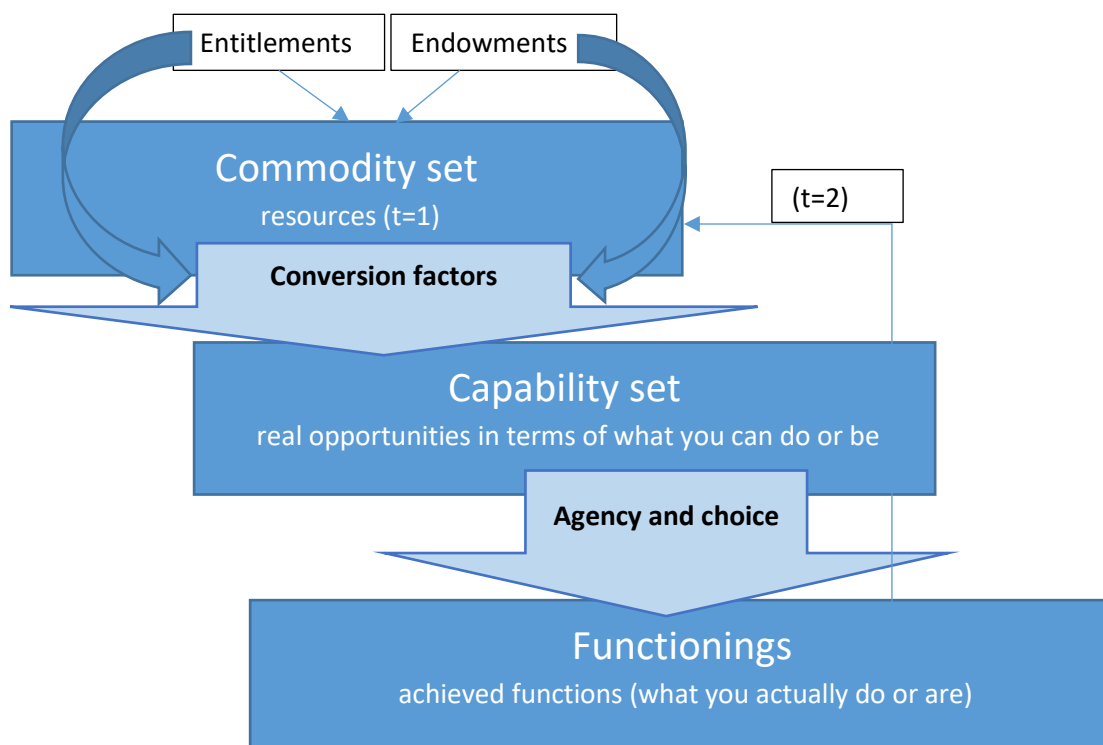
In *Commodities and Capabilities* (Sen, 1985, pp. 7-9), Sen uses a series of simple equations to formally set out the relationship between a commodity set, a capability set and achieved functionings. One issue with the static equation approach is that the dynamic nature of capabilities is not recognised. An alternative approach is to use a series of equations or diagram. Figure 1 presents one way of represents the capability approach as a flow diagram. The typical starting point is to consider an individual's 'commodity set' which is made up of resources in the form of goods and services (some of which cannot be traded in the conventional sense). The commodity set is not randomly generated as it is affected by endowments (such as innate ability) and entitlements (which can be set through legislation and shaped by social and cultural norms which may, for example, set entitlements within families and communities). A given commodity set can be converted into a capability set with a range of factors influence the conversion rate (personal, social and environmental).

From the substantive opportunities represented by a given capability set, individuals choose/achieve an observed set of functions (functionings) – what individuals actually

do and are (physically secure, well-nourished, in good health, enjoying a social life, etc.). Choice and agency can be curtailed, narrowing the possible set of “beings” and “doings” that an individual can achieve from any given capability set. The model is dynamic so that in the next time period ($t=2$) achieved functionings in the initial period can directly affect the available commodity set (for example, being financially secure, achieving high esteem, being in good health).

Note that this is a stylized representation and it is possible for some capabilities to be in the set without the need for commodities – for example, behaviour of others can affect the capability to achieve high esteem; illness may spread from one person to another.

Figure 1: Stylized Dynamic Model of the Capability Approach Building Blocks



Although the capability approach is inherently an assessment of individual well-being, an expanding body of literature addresses the role that collective action can play in processes of capability expansion. Social movements, human rights campaigns, social action to promote group identity, recognition and equality, including gender equality and indigenous people’s struggles, civil society and NGO campaigns, grass-roots action and self-help initiatives can be critical influences on the capabilities that are secured for individuals and groups. As we have shown, the capability approach puts emphasis on the concept of agency as well as that of wellbeing, and processes of capability expansion often occur when disadvantaged people come together and act as a group. Indeed, in some contexts, collective group action of this type may be necessary in order to secure and expand capabilities (Ibrahim 2006, 2017, Robeyns 2017a, pp. 99-103).

Operationalising the Capability Approach

One of the main challenges to operationalising the capability approach is that there is no definitive list of capabilities and Sen goes to some length explaining why a fixed list is not desirable (Sen, 2004). However, he does give some guidance on how capability lists should be derived and in his many writings he makes reference to a number of key capabilities which he clearly considers are vital for well-being (being well-nourished, physically secure, mobile, etc.). Others have attempted to construct a fixed list of capabilities. One of the best known is Nussbaum's who proposes a philosophically-derived capability list that is comprehensive in the sense that it aims to capture all central and valuable capabilities (Nussbaum, 2003).

There is also a wide debate on whether capabilities can be measured (see, for example, Sugden, 1993), with more agreement on the feasibility to measure 'functionings' (see Burchardt and Vizard (2011) for a discussion of this literature). Although these challenges were initially seen as barriers to operationalisation, considerable progress has been made and there are now examples of successful practical applications (see Dang (2014) for a recent review of quantitative applications, or Comim et al., 2010).

Examples of large scale operationalisation of the capability approach include the UN Human Development Index (HDI) which was designed to capture capabilities in three domains (a long and healthy life, being knowledgeable and have a decent standard of living). The index was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone (UNDP, 1990). The HDI has been used as a basis for analysis in the UN's annual Human Development Reports since the 1990s. Since 2010 an Inequality-adjusted Human Development Index (IHDI) has been published.

Another example is the Equality Measurement Framework (EMF). The EMF is a framework for equality monitoring (see Burchardt and Vizard, 2011) which has been extended to cover children (Clery et al., 2014) and in the context of human rights (Vizard, 2012). The frameworks have been used by the British [Equality and Human Rights Commission](#) as a basis for equality and human rights monitoring (Alkire et al (2009), Candler et al (2011), EHRC (2011, 2015), Vizard and Speed (2015)) and have now been replaced by a single framework (EHRC, 2017). The EMF was developed through first identifying a 'minimum core' capability list derived from the international human rights framework. This was followed by a deliberative exercise to refine, expand and orientate the list.

In addition to the large scale examples, researchers have successfully operationalised the capability approach to assess well-being. Interested readers could usefully start by exploring articles published in the *Journal of Human Development and Capabilities*.

Applying the Capability Approach to measure capability-inequality

A further challenge we face is that we want to design a capability-inequality framework while Sen's capability approach has been mainly used to measure capability-poverty; whether or not individuals achieve basic capabilities or minimum functioning and how rates differ between population groups, such as differences between men and women.

These are sometimes referred to as 'horizontal inequality' and Stewart (2016) provides a useful discussion on the importance of analysing and addressing horizontal inequalities, and Kabeer (2016) discusses the challenges of analysing intersecting inequalities. We are concerned with these forms of inequality but we are also interested in evaluating variation in capabilities, such as distinguishing between people who have greater and lesser capability to influence other people or concentration of productive resources and unequal access to the top jobs (which can be thought of as forms of 'vertical inequality').

This is not the first time that experts have considered how the capability approach can be used to assess inequality. Robeyns (2017b) makes the case that the capability approach can be used to identify "too much" as well as "too little". Where individuals have more resources than are needed, Robeyns outlines the moral position that these individuals have "too much". Concentration of income and wealth can have a negative bearing on other individuals' capabilities; for example, where money 'buys' power, or limits the opportunities of others. Robeyns (2017a) suggests that it is possible to conceptualise a "riches line" to identify "the rich", to complement the well-established concept of a poverty line. Burchardt and Hick argue that the capability approach could be employed to provide a richer understanding of inequality, and of 'advantage' in particular, noting that "Sen's early essay [Sen, 1979] on the capability approach was entitled 'Equality of what?', not 'Poverty of what?', yet much of what followed – including contributions by Sen himself – focused on the extent to which people are able to enjoy basic capabilities" (Burchardt and Hick, 2017, p.4).

There is no reason why attention should be restricted to examining disadvantage as the same assessment of well-being can be applied across any distribution. Burchardt and Hick (2017) explain how the concept of capability-inequality can be rendered consistent with the nature of inequality as we tend to understand it, extending beyond unequal distributions of income and wealth to inequalities in the capabilities enjoyed across a range of critical areas of life. Others have also made the case that the capability approach can be used to explore inequalities. For example, Therborn (2013) draws inspiration from the capability approach to make the case that we should be concerned with more than economic inequalities and that inequalities between and within groups can (and have) variously moved in opposite directions across time and place, and by horizontal and vertical dimensions.

A focus on capability-inequality allows us to analyse and cover certain dimensions that a focus on capability-poverty does not. For example, lack of power among the least well-off can signal a form of capability-poverty but concentration of power among a small elite would be missed with such a focus. In addition, widening the concept of capability to include inequality and advantage introduces the possibility that the set of capabilities could include those that harm other people, particularly the ability to exercise control over others. For example, advantage can be secured through exploiting other people's labour, manipulation of political and legal systems and through threats of violence. Some have argued that capabilities that harm others do not belong in the set but Sen rejects the notion that capabilities are by definition good capabilities, or only those that are not harmful to others (Sen, 2009).

From a practical point of view, empirical measurement of capability-inequality rather than capability-poverty throws up additional challenges. Measures of economic inequality (earnings, income, wealth, consumption, etc.) are now well-established, with recognised differences in the strengths and weaknesses of each inequality measure, and the types of inequality that they capture. The measurement of inequality of non-economic dimensions of well-being is less developed although advances are being made (see, for example, Cowell and Flachaire, 2017) and measures are now fairly well developed for education and health. This is an active area of research and we expect significant advances to be made in the near future.

Key features of the Multidimensional Inequality Framework

The Multidimensional Inequality Framework is structured around seven life domains, reflecting core capabilities critical to well-being. Each domain is described by a short-title and a sub-title provides a bit more information on the capabilities covered in the domain (Table 1). Full details of the Framework can be found in the final part of this paper. In this section we describe the main features and how they relate to the theoretical foundation.

Table 1: Domains of the Multidimensional Inequality Framework

Domain	Short title	Sub-title
Domain 1	Life and health	Inequality in the capability to be alive and to live a healthy life
Domain 2	Physical and legal security	Inequality in the capability to live in physical safety and legal security
Domain 3	Education and learning	Inequality in the capability to be knowledgeable, to understand and reason, and to have the skills to participate in society
Domain 4	Financial security and dignified work	Inequality in the capability to achieve financial independence and security, enjoy dignified and fair work, and recognition of unpaid work and care
Domain 5	Comfortable, independent and secure living conditions	Inequality in the capability to enjoy comfortable, independent and secure living conditions
Domain 6	Participation, influence and voice	Inequality in the capability to participate in decision-making, have a voice and influence
Domain 7	Individual, family and social life	Inequality in the capability to enjoy individual, family and social life, to express yourself and to have self-respect

The selection of domains was informed directly by dedicated research during the course of this project which built on work undertaken in the development of the EMF (which has its roots in the international human rights framework), and took into account the

practical needs of Oxfam. Within each of the domains a series of sub-domains have been identified and within each sub-domain, there are a number of indicators and measures which can be used to measure and monitor multidimensional inequality. The Framework is flexible and easily adapted to different context, in keeping with Sen's view that any capability list should not be definitive but adapted to different context and uses. It is not envisaged that all of the measures will be applicable in every country settings. The user guides which are available in the online version, provide advice and tips on how the Framework can be modified for different settings (what we refer to as "Countryfication").

The selection of sub-domains, indicators and measures reflect key aspects of capability-inequality that the Framework is designed to capture. The measures are predominately individuals' achieved outcomes (functionings) rather than the full set of substantive opportunities (capabilities) that individuals were able to choose between; although some measures are included to try to illuminate critical aspects of capability-inequalities. The selection includes measures that help to identify:

- (a) where choice has been constrained;
- (b) evidence of harmful capabilities that can constrain the choice of others;
- (c) autonomy;
- (d) treatment by others;
- (e) the notion that it is possible to have too much as well as too little.

A number of different types of inequality are captured in the Framework. Measures of inequality within each domain include a combination of: differences in prevalence of advantage and disadvantage between groups (for example, victims of violence by gender or percentage of privately educated in the top professions); socio-economic gradients (for example, healthy life expectancy by social class or educational attainment by family income); ordinal inequality measures where outcomes are rated on an ordinal scale (for example, life satisfaction or subjective general health status); dispersion measures (relative and absolute income inequality or inequality in life expectancy); measures of concentration (top 1% share of private wealth holdings). The individual outcome measures include subjective as well as objective measures of inequality and encompasses measures on economic resources and subjective well-being. As shown earlier, comparison between subjective and objective measures can help to highlight where capabilities have been constrained.

In the online version, the measures are accompanied by tailored advice on which breakdowns should be considered. In general terms, we suggest that, where information is available, measures should be broken down by: gender, age group, social class/caste, ethnic group and disability status. This is to guide measures of horizontal inequalities and to help identify where capabilities are constrained.

Drivers and policy solutions

In this section we briefly describe the work we have been doing on identifying main driver categories and candidate policies. The detail is not presented here but is available on our dedicated website. Another original feature of the Framework is that we have operationalised what are referred to as ‘conversion factors’ in the capability approach to guide the identification of inequality drivers in each domain. These are factors which can increase inequalities by constraining capabilities for some individuals or groups and enhancing and expanding capabilities for others. For example, social and cultural norms which favour boy’s education over girl’s can drive inequalities in education attainment between men and women, and contribute to gender inequalities in other domains such as health, financial independence and legal security. Corruption may drive inequalities in legal security, political influence and financial security. Inadequate investments in security in poor neighbourhoods can drive inequalities in physical security and personal safety. Weak design and implementation of institutional and policy frameworks can lead to discrimination and drive inequalities in employment, self-confidence and self-esteem, physical security and personal safety, education and health. Weak labour market institutions can drive wage inequality leading to high rates of pay for managers and executives and extreme low pay for low skilled workers.

The identification of main driver categories is provided as a guide and supported by a set of guiding questions for analysis for each category. The first step should always be to apply the Framework, measure and analyse inequalities within your country or region. The identification of inequality drivers can be approached through a variety of methods using the main driver categories and guiding questions as a means to: 1) conduct evidence review; 2) conduct or commission new research; 3) organise brainstorming sessions and roundtables with experts. Policy makers and political actors can be included in this process to build consensus and promote buy-in. To aid this process, in the online version, guiding questions are provided for each main driver category. These are accompanied by a selection of driver indicators which can also be used to assist with the identification of drivers.

Following the identification of drivers, the next step is the critical stage of finding policy solutions. For each of the main driver categories a selection of candidate policies have been suggested. This information is available in the online version of the Framework, along with a selection of policy reviews.

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Domain 1. Life and health: Inequality in the capability to be alive and to live a healthy life

Sub-domains:

1.A: Avoid premature mortality through disease, neglect, injury or suicide

1.B: Be protected from being killed or murdered

1.C: Be protected from natural disasters and non-natural causes

1.D: Achieve the highest possible standard of general health

1.E: Enjoy good mental health

1.F: Have good sexual and reproductive health

The life and health domain covers the capability to be alive, to enjoy longevity and avoid premature death. Inequality measures capture differences in mortality risk which may be due to differences in exposure to dangerous situations, lifestyle factors and differences in medical treatment. It also captures key health inequalities across physical and mental health outcomes.

In relation to inequality in premature death, this domain covers instances of death from violations and infringements of people's safety and security by individuals, organisations and the state. It includes death from non-natural causes in institutions (police custody, prisons, care homes, etc.) and as a result of war, conflict and protest. It also includes measures that capture unequal exposure to death as a result of natural disasters, climate change and other environmental factors.

One of the main causes of premature death is disease. Inequalities exist due to differences in exposure, lifestyle factors and differences in medical treatment. Measures are included for communicable and non-communicable disease mortality, with differences in mortality rates computed across population sub-groups.

Forced migration puts some people at much greater risk of mortality during periods of flight and transit. The failure of the state in protecting asylum seekers, refugees and others facing forced migration (due to, for example, flood, famine, conflict or other disasters) can put some individuals at much greater risk of mortality. The international community has a role to play here and many actors have a responsibility for keeping such individuals safe.

Gang-related homicides, deaths resulting from 'terrorist' activity and suspected deaths reported as 'disappearances' are also included in this domain.

There are a number of measures designed to pick-up key gender inequalities: maternal mortality, live births, suicide, homicide and domestic homicide. From an inequality perspective there are important factors affecting differences between men and women:

“Gender biases in power, resources, entitlements, norms and values, and the way in which organizations are structured and programmes are run damage the health of millions of girls and women. The position of women in society is also associated with child health and survival – of boys and girls.” (WHO, 2008).

The health outcomes included in this domain make reference to key capabilities related to living a long and healthy life. These include overall summary measures of healthy life expectancy, objective and subjective measures of health status. The capability to live a healthy life is affected by biological, physical and mental factors, economic resources and social conditions in the environment, and their interaction (Venkatapuram, 2011). Unequal distributions of these factors play an important role in shaping health inequalities (Marmot, 2016). People need to benefit equally from access to quality health services, medical advances in the treatment of disease, should the need arise, and be protected from communicable diseases. Women need to receive the right treatment and protection during pregnancy, childbirth and in the post-natal period. The treatment and protection of children, particularly during the first five years of life, is a critical element.

Medical advances have made considerable progress in improving health outcomes through the prevention and treatment of diseases and through advances in trauma and neonatal care. This has contributed to increases in average life expectancy in many countries but these additional years of life are not always healthy and inequalities in health outcomes remain high (McKnight and Cowell, 2014). In addition, the cost of medical advances and new treatments and technologies put these out of the reach of many; contributing further to health inequalities. Also, some aspects of health (for example, mental health) have not received the same level of attention or investment and new types of epidemic, such as obesity, are on the rise.

The World Health Organisation (WHO) views health inequities as avoidable inequalities in health between groups of people within and between countries. “These inequities arise from inequalities within and between societies. Social and economic conditions and their effects on people’s lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs.” (WHO, 2008).

Measurement considerations

Many of the inequality measures in this domain compare incidence rates between population sub-groups. For example, live births by gender, homicide rates by age group, prevalence of key diseases (such as malaria) by sex and age, rates of obesity by socio-economic group. Some measure ordinal inequality such as inequality in self-reported current health status, and some measure inequality in continuous variables such as inequality in mental health score and inequality in life expectancy.

There is generally good quality data available for the measures included in this domain. This is helped through an overlap with indicators that form part of SDG monitoring. The mapping between the two can be found in the online version of the Framework. The work of the WHO has also helped to facilitate access to good quality data on health and life inequalities.

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Domain 1: Sub-domains, indicators and measures

Sub-domain 1.A: Avoid premature mortality through disease, neglect, injury or suicide

Indicator 1.1: Inequality in life expectancy

Measure 1.1.1: Live births by gender

Measure 1.1.2: Perinatal, infant and under 5 mortality rates

Measure 1.1.3: Inequality in age-mortality rates

Measure 1.1.4: Period life expectancy at birth, and ages 20, 65 and 80

Indicator 1.2: Specific-cause mortality rates

Measure 1.2.1: Mortality rates due to the top 5 communicable diseases (country specific – eg influenza, HIV, malaria, tuberculosis, hepatitis)

Measure 1.2.2: Mortality rates due to the top 5 non-communicable diseases (country specific – eg cardiovascular disease, cancer, diabetes, chronic respiratory disease, hypertension, disease related to diet and nutrition)

Measure 1.2.3: Maternal mortality ratio - the number of maternal deaths during a year per 100,000 live births

Measure 1.2.4: Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene

Measure 1.2.5: Age-standardized death rate attributable to air pollution (per 100,000)

Measure 1.2.6: Death rate due to: (a) road traffic accident injuries; (b) other unintentional injuries

Measure 1.2.7: Suicide mortality rate

Sub-domain 1.B: Be protected from being killed or murdered

Indicator 1.3: Homicide

Measure 1.3.1: Homicide rate

Measure 1.3.2: Domestic homicide rate (with separate reporting of relationship of victim to principal suspect, including partner homicide)

Measure 1.3.3: Racially motivated, religiously motivated and homophobic homicide rate

Sub-domain 1.C: Be protected from natural disasters and non-natural causes

Indicator 1.4: Death from natural disasters

Measure 1.5.1: Deaths from natural disasters – earthquakes; volcanic eruptions; flood; fire; famine; draught; hurricane (typhoon/cyclone)

Indicator 1.5: Death rates from non-natural causes

Measure 1.5.1: Deaths from non-natural causes during or following police custody

Measure 1.5.2: Deaths in prisons: (a) from non-natural causes; (b) self-inflicted

Measure 1.5.3: Deaths from non-natural causes for people resident in health or social care establishments

Measure 1.5.4: Deaths from torture and political oppression (*Guidance – ok to use allegations data collected by NGOs*)

Measure 1.5.5: Civilian deaths as a result of war, conflict, unrest and protest (*Guidance - includes disappearances – ok to use allegations data collected by NGOs*)

Sub-domain 1.D: Achieve the highest possible standard of general health

Indicator 1.6: Subjective evaluation of current health status and treatment

Measure 1.6.1: Percentage who report poor current health status

Measure 1.6.2: Inequality in self-reported current health status

Measure 1.6.3: Percentage who are treated with dignity and respect in health treatment

Indicator 1.7: Prevalence of key diseases associated with deprivation and low income

Measure 1.7.1: Prevalence of new infections among uninfected population, by sex, age and key populations:

(a) Number of new HIV infections per 1,000 uninfected population;

(b) Tuberculosis incidence per 100,000 population;

(c) Malaria incidence per 1,000 population;

(d) Hepatitis B incidence per 100,000 population

Measure 1.7.2: Percentage requiring interventions against neglected tropical diseases

Indicator 1.8: Healthy life

Measure 1.8.1: Inequality in healthy life expectancy

Measure 1.8.2: Prevalence of: (a) Stunting in young children; (b) undernourishment

Measure 1.8.3: Rates of obesity/Prevalence of Type II diabetes

Measure 1.8.4: Percentage diagnosed with eating disorders

Measure 1.8.5: Rates of: (a) alcoholism; (b) drug addiction; (c) tobacco use

Measure 1.8.6: Prevalence of asthma

Measure 1.8.7: Percentage who report participation in sport/physical activity on regular basis

Indicator 1.9: Limiting illness and disability

Measure 1.9.1: Percentage who report a long-standing health problem or disability that substantially limits their ability to carry out normal day-to-day activities

Sub-domain 1.E: Enjoy good mental health

Indicator 1.10: Mental health

Measure 1.10.1: Percentage who report poor mental health and well-being

Measure 1.10.2: Inequality in mental health score

Sub-domain 1.F: Have good sexual and reproductive health

Indicator 1.11: Sexual and reproductive health

Measure 1.11.1: Rates of sexually transmitted infections

Measure 1.11.2: Percentage of women with unmet need for family planning

Measure 1.11.3: Percentage of women who have given birth in the last five years having delivery attended by a qualified health professional

Measure 1.11.4: Percentage of women who have given birth in the last five years who were given the choice of where to give birth and birthing method

Measure 1.11.5: Percentage of women in the last five years who have undergone an unofficial, unregulated abortion (age standardised rate per 1,000 women aged 15-44)

Domain 2. Physical and legal security: Inequality in the capability to live in physical safety and legal security

Sub-domains:

- 2.A: Be free from violence including sexual and gender-based violence, domestic violence and violence based on who you are*
- 2.B: Be free from identity based violence and hate crimes*
- 2.C: Be free from cruel, inhuman or degrading treatment or punishment*
- 2.D: Live without fear of humiliation, harassment, or abuse based on who you are; feel able to go out and to use public spaces safely and securely without fear*
- 2.E: Know you will be treated with equality, fairness and non-discrimination before the law, within the criminal or administrative systems; including the absence of corruption*
- 2.F: Have the human right to a fair trial; have fair and humane conditions of detention*
- 2.G: Have the human right to identity, name, gender and nationality*

This domain covers the key elements of physical security through indicators and measures that highlight absence of physical security as well as subjective measures reporting individuals' sense of physical security and safety. To avoid inequalities in legal security, people need to be protected and treated equally and fairly by the law. This domain covers inequalities in treatment before the law and within criminal or administrative systems.

The domain covers both objective and subjective measures of physical security. Objective measures include reports of the experience of physical violence where incidents are measured in household surveys as well as police recorded crimes from official statistics. Special attention is given to violence against women (physical, sexual and psychological). In recent times considerable progress has been made in collecting data on these types of violence (WHO, 2005). Subjective measures include whether people feel physically secure at home, in their neighbourhood and the extent to which people worry about physical attacks. These measures are important for capturing people's actual experiences of violence and insecurity and can help to overcome some of the problems relating to under-reporting of crimes to the police; particularly some forms of physical violence such as domestic violence, sexual assault, rape and violence perpetrated against children.

The physical mistreatment of those living in institutions (care homes, hospitals, etc.), including those in detention (prison, secure hospitals, police custody) are identified separately, highlighting the special circumstances and vulnerability of people in these situations. The behaviour of others plays an important role in the capability approach as it can both constrain as well as enhance individuals' capabilities.

Other forms of physical and psychological violation influencing people's capability to be and feel physically secure include: the incidence of torture and other forms of inhuman or degrading treatment or punishment, female genital mutilation, harassment, kidnap, 'disappearance', human trafficking and arbitrary detention. Evidence in the form of reported incidence of these types of crimes collected by NGOs may be used and can give a more accurate picture than official statistics in some countries.

The legal system, which includes the law itself as well as broader legal institutions and public administration, should treat all members of the population equally and without discrimination. Legal security in many settings is not only influenced by formal legal mechanisms such as the state judiciary, and different branches of the formal legal system (constitutional law, domestic law, international law, customary law, civil law, etc.) but also by broader legal arrangements and institutions (the quasi-legal system, for example, complaints mechanisms, tribunals and ombudsmen) and informal legal systems (for example, the formal and informal enforcement of religious codes such as Sharia law and other informal legal codes, customs and practices). Therefore, this domain is broadly conceptualised in order to incorporate these different factors.

This domain captures not just the extent to which some individuals are disadvantaged by the legal system but also how some advantaged people can receive preferential treatment. This may be through the nature, scope and range of behaviours that are criminalised; disproportionate power and influence in the setting of laws and how laws are enforced; how those found guilty of committing a crime are punished (being let off without charge or through more lenient sentences). Economic resources often play a key role in determining access to justice and inequalities in legal justice. There is some evidence that increasing inequality has been linked to increases in some types of crime (Hagan and Peterson, 1995; Rufrancos, et al., 2013), can undermine the rule of law (Stiglitz, 2012) and lead to increases for punitive punishment in some countries (Côté-Lussier, 2016). In some countries and contexts the judicial and legal system can be weak, underdeveloped and biased. In other countries, the domestic legal system is at odds with internationally recognised human rights. High quality legal representation is costly and often far out of the reach of the majority, and in some countries reforming the legal system, particularly in relation to legal aid, is resulting in less rather than more access to justice. A number of measures are designed to capture this form of inequality.

The legal treatment of children in terms of parental rights, rights of children and the treatment of minors before the law are all important aspects of legal security. The principles developed in the context of the UN Convention on the Rights of the Child provide importance guidance for balancing the rights of parents on the one hand, and the rights of the child, together with the need for legal special protection of the child, on the other.

Measurement considerations

The development of indicators and their interpretation in this domain can be complicated by the fact that some of the measures relate to illegal, covert and concealed activities, for example, torture by the state and human trafficking. This increases the need to triangulate through the use of multiple sources (for example, in the context of torture, using NGO and human rights allegations data).

In terms of inequality in physical security and personal safety, most of the indicators provide measures on whether or not individuals have experienced a form of physical violence, maltreatment or intimidation (including bullying and identity-based violence). Inequality measures adopted typically quantify differences in the incidence of physical violence and maltreatment between population sub-groups covering the main areas of violent crime, sexual and domestic violence, hate crimes, cruelty, physical punishment and degrading treatment. If possible, and where appropriate, measures of inequality should include breakdowns for key population groups. If information on the number of incidents is available this can be used to compute an inequality measure to capture repeat victimisation, which is often an important feature of, for example, domestic and sexual violence.

Where information is available as an ordinal scale (for example, for perceptions of safety available from surveys where individuals indicate whether they feel: very safe/quite safe/not safe/very unsafe), an ordinal inequality measure can be computed.

In some countries it will be important to incorporate quasi-legal systems: village councils etc.; role of elders and religious 'courts' and laws.

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Domain 2: Sub-domains, indicators and measures

Sub-domain 2.A: Be free from violence including sexual and gender-based violence, domestic violence and violence based on who you are

Indicator 2.1: Violent crime

Measure 2.1.1: Percentage of population subjected to physical, psychological or sexual violence in the previous 12 months, with separate reporting of physical assault, rape and assault by penetration (including attempts) and other sexual violence, and by gender and age

Measure 2.1.2: Percentage of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence, and by age

Measure 2.1.3: Percentage of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence

Measure 2.1.4: Percentage of children aged 0-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month

Measure 2.1.5: Percentage of children aged 0-15 years who experienced any sexual violence in the previous 12 months

Sub-domain 2.B: Be free from identify based violence and hate crimes

Indicator 2.2: Hate crime

Measure 2.2.1: Percentage that are victims of hate crime by: (a) race; (b) religion; (c) gender identity; (d) overall

Sub-domain 2.C: Be free from cruel, inhuman or degrading treatment or punishment

Indicator 2.3: Bodily and psychological integrity, and physical security

Measure 2.3.1: Percentage of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age

Measure 2.3.2: Percentage of population victim of physical, psychological or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months

Measure 2.3.3: Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation (*Guidance - can supplement through use of data collected by NGOs and human rights bodies*)

Measure 2.3.4: Number of verified cases of kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months (*Guidance - can supplement through use of allegations data collected by NGOs and human rights bodies*)

Indicator 2.4: Physical security for people resident or detained in public and private institutions

Measure 2.4.1: Rates of physical assaults in: police detention; prison; refugee camps; immigration detention centres; children in residential care; young offender institutions; mental health institutions

Measure 2.4.2: Rates of elder abuse and other abuse of the non-private household population

Sub-domain 2.D: Live without fear of humiliation, harassment, or abuse based on who you are; feel able to go out and to use public spaces safely and securely without fear

Indicator 2.5: Fear for personal safety

Measure 2.5.1: Percentage that feel very unsafe or unsafe being alone at home and/or in local area (during the day and after dark)

Measure 2.5.2: Percentage that feel very worried/worried about physical attack, sexual assault, intimidation and acquisitive crime

Measure 2.5.3: Percentage concerned about their personal safety using public transport (during the day and after dark)

Measure 2.5.4: Percentage paying for security: (a) for personal protection; (b) security guards protecting private property; (c) to live in gated communities

Sub-domain 2.E: Know you will be treated with equality, fairness and non-discrimination before the law, within the criminal or administrative systems; including the absence of corruption

Indicator 2.6: Equal treatment by the police and the legal system

Measure 2.6.1: Percentage of population aged 16+ by age, sex and key populations, who the police have: (a) stopped on foot or in vehicles; (b) stopped and searched; (c) conducted unannounced property/dwelling search

Measure 2.6.2: Percentage who are confident that the criminal justice system (police, courts, prison and probation service): (a) meets the needs of victims; (b) respects the rights of those accused of an offence and treats them fairly

Measure 2.6.3: Share of the population who believe that the public administration make fair and impartial decisions

Indicator 2.7: Offences reported and brought to justice: Rape, domestic violence and hate crime

Measure 2.7.1: Number of cases of rape estimated from population survey sources, compared with the number of cases reported to and recorded by the police, and the number of legal cases successfully prosecuted

Measure 2.7.2: Number of cases of domestic violence estimated from population survey sources, compared with the number of cases reported to and recorded by the police, and the number of legal cases successfully prosecuted

Measure 2.7.3: Number of cases of hate crime estimated from population survey sources, compared with the number of cases reported to and recorded by the police, and the number of legal cases successfully prosecuted by: (a) race; (b) religion; (c) gender identity; (d) overall

Indicator 2.8: Fair and equal treatment within the legal system

Measure 2.8.1: Percentage of the population who believe that poor people are treated worse by the police

Measure 2.8.2: Percentage of the population who believe that the police make fair and impartial decisions

Measure 2.8.3: Perception of how fair the courts are to majority versus minority race/ethnic group

Measure 2.8.4: Trust in the criminal justice system: (a) trust in courts' procedural fairness and trust in their competence; (b) trust in the police

Measure 2.8.5: Perceptions of judicial and police corruptions: (a) how often the police take bribes; (b) how often judges take bribes

Measure 2.8.6: Sentencing disparities: evidence by gender, race/ethnic group, economic or social status

Sub-domain 2.F: Have fair and humane conditions of detention

Indicator 2.9: Detention: Numbers, physical conditions and rights of detainees

Measure 2.9.1: Detention numbers and conditions in prisons (includes prison population numbers, life sentences, numbers facing a death penalty and prison conditions such as overcrowding, sanitation and visiting rights)

Measure 2.9.2: Detention and conditions in other establishments: (a) Young offender institutions; (b) Secure hospitals; (c) Immigration centres; (d) Military prisons; (e) House arrest

Measure 2.9.3: Percentage of the population held without charge

Sub-domain 2.G: Have the human right to identity, name, gender and nationality

Indicator 2.10: Enjoy right to identity, name, gender and nationality

Measure 2.10.1: Percentage of children under 5 years of age whose births have been registered with a civil authority, by age

Domain 3. Education and learning: Inequality in the capability to be knowledgeable, to understand and reason, and to have the skills to participate in society

Sub-domains:

3.A: Attain the highest possible standard of knowledge, understanding and reasoning through access to education, training and lifelong learning that meets individual needs

3.B: Evidence of financial constraints limiting attainment and unequal access to elite education opportunities

3.C: Access information and technology necessary to participate in society

3.D: Develop critical thinking, active and global citizenship, knowledge and understanding of human rights

3.E: Be treated with dignity and respect in education and learning establishments

The capability to be knowledgeable, to understand and reason, and to have the skills to participate in society is a critical life domain. The capability to function as a knowledgeable learner is both important in its own right but also contributes to the expansion and equality of capabilities in other spheres of life. The capability approach motivates us to look beyond simple human capital style measures of education outcomes as it recognises that knowledge bestows a range of non-pecuniary benefits. For example, a year of schooling is a problematic unit for measuring education, as it does not reflect the quality or content of what was learnt in that year (Ferreira and Gignoux, 2013). The domain also captures outcomes which reflect the extent to which individuals are fulfilled and stimulated intellectually, including being creative. Expanding educational capability can enhance the quality of life for individuals by enabling them to participate in activities such as reading a book or enjoying an art exhibition, which brings ‘intrinsic pleasure’ (OECD, 2011).

This domain covers inequalities in education capabilities over the life-course, from early development through to adulthood, through proxy measures of participation, access and attainment (achieved functionings) and knowledge. The domain includes measures of basic skills and low levels of educational attainment (including lack of educational qualifications) but also measures of high attainment, unequal access to elite education opportunities, and information and communication technology skills.

The domain covers the preparedness of young children set to enter the formal education system to measure differences between children in terms of their position to benefit fully and equally from formal schooling. Research has affirmed the significance of early childhood development for future health, behaviour and learning (Shonkoff and Richer, 2013). The early years are critical as the brain develops most rapidly in the first

few years of a child's life. Nurturing care, as well as adequate nutrition and a safe environment, are all necessary elements that allow for healthy cognitive development, and contribute to the school readiness of young children.

The unequal treatment of pupils within schools, including bullying from other children and ill treatment by teachers can be important determinants of education outcomes and such experiences can have a long term negative impact on attitudes to learning and outcomes in adulthood (Wolke and Lereya, 2015). The domain also looks beyond schooling to include lifelong learning and knowledge required to participate in society; including technological skills; skills related to accessing information held on the internet and the skills to distinguish between information of differing quality.

The capability approach recognises human diversity both in terms of resources (this may be innate ability) and in terms of diversity in tastes and preferences, and individual choice (Sen, 1992). We are also interested in understanding education and learning inequalities which are driven by differences in the ability of individuals to convert resources into outcomes rather than simply looking at inequalities in outcomes.

Autonomy to choose (agency) is more complex in this than in many other domains as parents typically make choices on behalf of their children. As Walker (2006) notes, education plays a critical role in the development of adult capabilities across a number of spheres. This therefore provides some conflict between valuing children's freedom to choose whether or not to attend school and the freedoms they will have in their adult lives; a child may, given the choice, decide not to attend school without fully comprehending that this will reduce their opportunities in adult life and lead to restricted future individual freedoms and agency. Furthermore, improving education within society also facilitates greater democracy and enables disadvantaged groups to 'increase their ability to resist inequalities and get a fairer deal in and through education' (Vaughan and Walker, 2012).

Measurement considerations

Inequalities in this domain include differences in attainment between groups - age, gender, ethnicity, religion, indigenous people, children in vulnerable situations – as well as family background. The Framework includes measures of overall inequality in educational attainment, ordinal inequality measures based on highest level of educational attainment and evidence of elitism.

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Domain 3: Sub-domains, indicators and measures

Sub-domain 3.A: Attain the highest possible standard of knowledge, understanding and reasoning through access to education, training and lifelong learning that meets individual needs

Indicator 3.1: Basic skills

Measure 3.1.1: Percentage of people of working age achieving functional literacy and numeracy skills

Measure 3.1.2: Inequality in maths and reading skills (measured by age 15)

Measure 3.1.3: Percentage of children under 5 years of age who are developmentally on track in learning

Indicator 3.2: Educational attainment and schooling

Measure 3.2.1: Percentage of each age group completing: (a) primary education; (b) secondary education; c) further education or youth training; d) higher education

Measure 3.2.2: Inequality in educational attainment (ISCED 2011 0-8 levels) for population aged 25+ years (years of schooling if attainment is missing)

Measure 3.2.3: Educational attainment by family background

Measure 3.2.4: Percentage of 16-18 year olds not in education, employment or training

Indicator 3.3: Participation in lifelong learning

Measure 3.3.1: Percentage of population aged 25+ years who have participated in formal or informal learning in last 12 months

Sub-domain 3.B: Evidence of financial constraints limiting attainment and unequal access to elite education opportunities

Indicator 3.4: Evidence of education elitism

Measure 3.4.1: Percentage of young people unable to pursue further or higher education due to financial constraints

Measure 3.4.2: Percentage of secondary school population attending private fee paying schools

Measure 3.4.3: Evidence of unequal access to prestigious education institutions due to discriminatory admissions procedures by gender, race/ethnicity, socio-economic status

Sub-domain 3.C: Access information and technology necessary to participate in society

Indicator 3.5: Use of the internet and technology

Measure 3.5.1: Percentage of population who have used the internet for any purpose within the last 3 months by age

Measure 3.5.2: Percentage of youth and adults with information and communications technology (ICT) skills, by type of skill

Sub-domain 3.D: Develop critical thinking, active and global citizenship, knowledge and understanding of human rights

Indicator 3.6: Critical thinking and awareness of rights

Measure 3.6.1: Percentage who have knowledge and understanding of human rights and consumer rights etc. through: (a) inclusion on school curriculum; (b) campaigns, literature and public events

Sub-domain 3.E: Be treated with dignity and respect in education and learning establishments

Indicator 3.7: Treatment in education and learning establishments

Measure 3.7.1: Percentage of those attending who say they are: (a) treated with respect at school or college; (b) have experienced bullying or violence at an educational establishment

Domain 4: Financial security and dignified work: Inequality in the capability to achieve financial independence and security, enjoy dignified and fair work, and recognition of unpaid work and care

Sub-domains:

- 4.A: Achieve financial security and resilience against shocks*
- 4.B: Enjoy financial independence and control over personal spending*
- 4.C: Evidence of excess financial accumulation and financial advantage in the control and ownership of resources*
- 4.D: Have equal access to paid work, job opportunities, productive assets and markets*
- 4.E: Evidence of unequal pay and access to the highest paid work opportunities*
- 4.F: Enjoy good working relations and dignified and fair work conditions*
- 4.G: Protection from forced labour and exploitative conditions*
- 4.H: Enjoy equal division of care and un-paid domestic work*

The capability to be financially secure and enjoy financial independence is a key element of well-being, and economic inequality can drive inequalities in other domains. Work provides an income and a range of non-pecuniary benefits. Inequalities include exploitation by employers and unequal access to the top jobs. This domain focuses on inequalities in financial independence, financial security and dignified work, through a range of measures covering financial advantage and disadvantage.

Many have argued for examining economic inequalities alongside a range of other forms of inequality in capabilities (e.g. Therborn, 2013). The fact that economic resources (income and wealth) provide the means to other ends both now and in the future, highlights their importance. In addition, personal wealth holdings (i.e. examining inequalities in financial stocks in addition to financial flows) can provide important information on people's future capability sets and financial security over the lifecycle.

The idea that some individuals can have 'too much' as well as 'too little' income or other economic resource has been explored by a number of scholars (see, for example, Robeyns, 2017). Where individuals have more resources than are needed, Robeyns outlines the moral position that these individuals have "too much" and suggests that development of a 'richness line' to complement the 'poverty line'. Robeyns (and others) describe how concentration of income and wealth can have a negative bearing on other people's capabilities; where money 'buys' power, or limits the opportunities of others.

Burchardt and Hick (2017) highlight how high income and wealth can be associated with freedoms enjoyed in other domains (political influence, geographical mobility, security and room for legal manoeuvre) and that the very well-off (elites) do not need to

actualise these freedoms in order to secure advantage – the *capability* is often sufficient. In the context of advantage, Burchardt and Hick argue, the non-observable nature of people's capabilities becomes more significant at high levels of income. Analysing 'functionings' in relation to 'basic' capabilities is more straightforward as absence is more likely to reflect a lack of capability. In the context of advantage, "as we move away from 'basic' achievements, the relationship between capabilities and functionings is likely to be governed to a greater extent by the preferences of the individual" (Burchardt and Hick, 2017, p.10). There is a strong case for using measures of income and wealth where they represent better proxies of the underlying capabilities than the available measures of 'functionings' (Burchardt and Hick, 2017).

Economically rewarding activities in the form of paid work and entrepreneurial activities are important because the income generated can assist individuals to pursue the life that they wish to lead, to support those dependent on them, such as children, and to avoid poverty and destitution. In addition to the income that work generates, work can be rewarding in its own right, particularly for those able to pursue an interest. We observe inequalities not just in the rewards from work but also in the quality of jobs. These inequalities include safety at work, autonomy, treatment at work and discrimination. Research shows that differences in these relations and conditions of work also impact on capabilities in other spheres of life (physical security, health, etc) (see, for example, Bartley, 2005). Some forms of work are precarious and temporary in nature and there can be large differences between conditions for those working in the formal and informal labour markets. Conditions can be particularly bad for individuals working under exploitative conditions and in forced labour (complete lack of autonomy). Measures for these aspects of dignified work are included in this domain.

Unequal access to the best opportunities and how this relates to family background and forms of discrimination are key aspects of labour market inequality captured in this domain. These are forms of social mobility and a number of different measures are included in this domain, which include standard measures measuring the correlation between outcomes for parents and children (in income, earnings and social class) and perceptions of equal opportunity and social mobility.

The importance of paid work as an activity clearly varies between different age groups, with less importance for those old enough to retire from work and those able to retire on an adequate income. Not all individuals have access to pension income (and therefore need to work to secure an income) and some individuals choose to continue working past 'retirement age' for the non-pecuniary benefits that work has to offer.

This domain also covers forced labour, exploitative labour and child labour. Although children may 'choose' to work and income from their employment may make a crucial contribution to the family budget, child labour is considered a negative outcome. Child labour does not refer to 'pocket-money' jobs, it refers to work that deprives children of their childhood, their potential and their dignity which is harmful to physical and mental development (more information can be found in the ILO publication – *What is child labour?*). Similarly, children shouldering the burden of caring for other family

members limits their capacity to engage in activities which would expand their adult capabilities or simply the freedom for children to 'play' and socialise with peers.

Measurement considerations

Key measures of economic inequality in earnings, income and wealth, which include measures of advantage (concentration of income and wealth among a few) and disadvantage (income poverty, incidence of low pay, over-indebtedness) are included in this domain. Measures include overall dispersion of income, earnings and wealth, financial resilience, income security and volatility, and social mobility.

Obtaining accurate measure of child labour is challenging as there is no internationally agreed measure. One of the issues that requires consideration is time children spend on non-economic family productive activities, including household chores and care roles, which tend to be shouldered disproportionately by girls in many cultures, and therefore excluding them may understate girls' involvement in child labour. UNICEF, ILO and the World Bank (Understanding Children's Work collaboration) have made some progress in establishing a standard quantitative measure (Ritualo et al., 2003) and other work has suggested the use of children's subjective responses rather than adult's which can be biased (Dillon, 2010).

Measuring forced labour is also challenging but some progress has been made (Ruwanpura and Rai, 2004). The ILO define forced labour as "all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily."

<http://www.ilo.org/global/topics/forced-labour/definition/lang-en/index.htm>

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Domain 4: Sub-domains, indicators and measures

Sub-domain 4.A: Achieve financial security and resilience against shocks

Indicator 4.1: Income inequality, income security and financial resilience

Measure 4.1.1: Relative income inequality - Gini (or a measure of dispersion such as 90/10 or Palma ratio) – household equivalised disposable income

Measure 4.1.2: Concentration of income at the top - top income shares (top 10%/5%/1%)

Measure 4.1.3: Relative income poverty – income <60% median equivalised disposable income

Measure 4.1.4: Rate of absolute income poverty: (a) against a fixed poverty line; (b) material deprivation

Measure 4.1.5: Precariousness of household income: (a) income volatility; (b) perceptions of income insecurity

Measure 4.1.6: Rate of over-indebted households (debt/income ratio)

Measure 4.1.7: Percentage of households with high-cost, short-term loans (eg pay-day loans)

Sub-domain 4.B: Enjoy financial independence and control over personal spending

Indicator 4.2: Financial independence, control over resources and financial inclusion

Measure 4.2.1: Intra-household division of income

Measure 4.2.2: Percentage of partnered women with equal control over household budget

Measure 4.2.3: Percentage with a bank account

Sub-domain 4.C: Evidence of excess financial accumulation and financial advantage in the control and ownership of resources

Indicator 4.3: Inequality in private ownership of financial assets and resources

Measure 4.3.1: Wealth inequality: (a) concentration – top wealth shares (top 10%/5%/1%); (b) overall inequality (such as Gini or decile ratios); (c) homeownership and housing wealth

Measure 4.3.2: Concentration of land ownership - % of land area by number of land owners (for example, how many own 50% of land area)

Sub-domain 4.D: Have equal access to paid work, job opportunities, productive assets and markets

Indicator 4.4: Access to work

Measure 4.4.1: Percentage of working age in paid work (employment or self-employment)

Measure 4.4.2: Unemployment rate: (a) ILO rate; (b) unemployment benefit claimant rate

Measure 4.4.3: Percentage of young people (15-24 years) not in education, training or employment

Sub-domain 4.E: Evidence of unequal pay and access to the highest paid work opportunities

Indicator 4.5: Earnings inequality (income from work)

Measure 4.5.1: Earnings inequality - Gini or percentile ratio - Annual/ monthly/ weekly/ hourly (depending on availability)

Measure 4.5.2: Earnings volatility - % of workers whose gross annual labour earnings increased by 20% or decreased by 20% in real terms from one year to the next

Measure 4.5.3: Low pay rate – Less than 2/3rd median hourly wage

Measure 4.5.4: High pay rate – greater than 2/3rd median hourly wage

Indicator 4.6: Social mobility, unequal pay and unequal access to the top jobs

Measure 4.6.1: Social mobility (social class, earnings, income) – correlation between parents' and their adult children's socio-economic outcomes

Measure 4.6.2: Perceptions of equal opportunity and social mobility

Measure 4.6.3: Percentage of women working in top professions

Measure 4.6.4: Gender, disability and racial pay gaps

Measure 4.6.5: Percentage of privately educated in top professions (managerial and professional, politicians, top civil service jobs, CEOs on boards, non-executive directors, high-ranking officers in the military)

Measure 4.6.6: Gender and racial occupational segregation

Sub-domain 4.F: Enjoy good working relations and dignified and fair work conditions

Indicator 4.7: Employment relations and conditions

Measure 4.7.1: Percentage working in the informal sector

Measure 4.7.2: Percentage employed on: (a) part-time contracts; (b) temporary contracts; (c) Zero hours contract; (d) without a contract

Measure 4.7.3: Workplace injury rate

Measure 4.7.4: Percentage of workers experiencing job strain

Measure 4.7.5: Percentage of workers who enjoy autonomy at work (tasks, start and leave time, breaks)

Measure 4.7.6: Percentage of workers with opportunities for promotion in current job

Measure 4.7.7: Inequality in job satisfaction

Sub-domain 4.G: Protection from forced labour and exploitative conditions

Indicator 4.8: Forced labour and child labour

Measure 4.8.1: Extent of forced labour – ILO definition: all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily

Measure 4.8.2: Extent of child labour: (a) children under the minimum age in unpermitted forms of work; (b) children in the worst forms of child labour; (c) children in hazardous work

Sub-domain 4.H: Enjoy equal division of care and un-paid domestic work

Indicator 4.9: Distribution of care, domestic duties and home production

Measure 4.9.1: Average time spent on: (a) domestic duties; (b) caring for others; (c) home production

Measure 4.9.2: Time-related under-employment

Domain 5. Comfortable, independent and secure living conditions: Inequality in the capability to enjoy comfortable, independent and secure living conditions

Sub-domains

5.A: Enjoy secure access to food, clean water, clean air, shelter, sanitation, warmth and utilities

5.B: Enjoy adequate housing quality and security

5.C: Enjoy living conditions that promote independence, dignity and self-respect

5.D: Move around freely and enjoy access to safe and appropriate transport

5.E: Access and enjoy green spaces and public spaces

5.F: Be able to achieve a good work-life/care-life balance

The capability to enjoy comfortable, independent and secure living conditions is assessed across a range of indicators and measures. This domain considers inequalities in meeting basic needs, access to good quality and secure housing, access to transport infrastructure, the ability to live in environments that promote dignity and respect, the quality of the local environment and the ability to enjoy leisure time alongside employment or caring responsibilities. These measures are used to assess differences across individuals and groups in terms of meeting minimum acceptable conditions, receiving adequate care, access to basic amenities, and the independence and freedoms required for people to lead the life they have reason to value.

Secure access to food, clean water, shelter, sanitation, warmth and utilities are basic defining features of secure and comfortable living conditions. Where a country or region faces emergencies such as natural disasters (flooding, drought, famine, earthquakes, volcanic eruptions, typhoons, violent storms), war and conflict, people face displacement, disrupting their lives and challenging their capability to enjoy comfortable, independent and secure living conditions or even meet their basic needs. These risks are not faced equally with women, disadvantaged and marginalised groups most vulnerable (Ferris, 2010; Neumayer and Plümper, 2007). Murphy and Gardoni (2010) demonstrate how the capability approach can be used to assess the impact of natural disasters on the basis of changes in individuals' capabilities. Inhibited access to basic needs does not only occur during times of disaster; for example, food poverty and homelessness are common in many high, middle and low income countries.

There are a number of different types of housing tenure: short-term and emergency accommodation (e.g. shelters and refugee camps), long-term informal settlements and slums, mobile accommodation and caravans (e.g. Roma, Gypsy and Traveller communities), and temporary and short-term tenancies, social housing and owner occupation. Roma, Gypsy and Traveller communities often face the threat of eviction due to the informal nature of their settlements, and may typically live on poor quality

land, and have no access to proper sanitation systems (Cromarty, 2018). However, it is important to recognise that this type of accommodation is as diverse as other types and not necessarily poor quality.

In terms of inequality, the measures in this domain do not just look at differences between accommodation types but also within accommodation types. Measures include overcrowding, facilities, structural quality and cost burden. These factors often reflect the autonomy of individuals and their ability to have choice and control over where they live. Poor quality housing leads to reduced quality of life, through poor health (e.g. respiratory diseases from dampness and some types of fuel), as well as poorer mental health from stress and social isolation. In contrast, some individuals can afford to live in luxury accommodation with surplus space, all the modern conveniences and very pleasant surroundings. Economic inequality can have quite profound effects on access to housing for those who are less well-off. In addition to economic inequality, segregation and discrimination can also have a strong influence on residential inequality which has consequences for health, education and well-being (Williams and Collins, 2001).

Mobility and geographical connectedness are important for independent living, to visit family and friends, to enhance work opportunities, to travel for pleasure and to socialise. Measures included in this domain include access to public transport (including when adaptations are necessary due to disability) and transport infrastructure, and geographical isolation. For those who experience reduced physical mobility due to disability or old age, there is a need for appropriate adaptations to homes to promote independent living, dignity and self-respect. Adequate care is also necessary for some individuals to remain living in their own homes.

We observe large variation in the quality of the local environment in which people live. Typical measures include: pollution levels; noise; odour; unsociable behaviour, rubbish; access to places where children can play; access to leisure facilities. Furthermore, access to green spaces and the natural world makes an important contribution to the quality of people's lives but is not available to everyone, particularly those living in densely populated urban areas.

Finally, this domain covers inequalities in who is able to achieve a good work-life balance, whether this is a balance between employment or care responsibilities and leisure. Some individuals are unable to work as many hours as they would like and some are required to work unreasonably long hours. The balance between work and other valued aspects of life, commonly referred to as the 'work-life' balance, is valued in its own right (Hobson, Fahlén and Takács, 2011). Where individuals are not in a position to choose their hours of work, spend too much time working, or work unsociable hours, this can place limits on other capabilities particularly in the individual, family and social life domain.

Measurement considerations

Inequality is measured in terms of differences in secure access to food, clean water, clean air, shelter, sanitation, warmth and utilities between different population sub-groups reflecting the fundamental importance of these conditions.

Variation in housing quality and security of housing tenure are captured by objective inequality measures. For example, rates of overcrowding, type of tenancy (short-term insecure, etc.) and housing quality index.

Independence is measured by geographic mobility through access to transport, the ability to live with dignity and respect for those with a disability and needing adaptations and care.

Work-life balance measures include time spent on leisure activities and subjective assessment of work life balance.

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Domain 5: Sub-domains, indicators and measures

Sub-domain 5.A: Enjoy secure access to food, clean water, clean air, shelter, sanitation, warmth and utilities

Indicator 5.1: Secure access to food, clean water, clean air, shelter, sanitation, warmth and utilities

- Measure 5.1.1: Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
- Measure 5.1.2: Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age
- Measure 5.1.3: Prevalence of malnutrition (weight for height $>+2$ or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)
- Measure 5.1.4: Percentage of population using safely managed drinking water services
- Measure 5.1.5: Percentage of population using safely managed sanitation services, including a hand-washing facility with soap and water
- Measure 5.1.6: Percentage of population sleeping rough without shelter
- Measure 5.1.7: Rates of fuel poverty – share of households unable to keep their home at a comfortable ambient temperature for a reasonable cost
- Measure 5.1.8: Percentage of population with access to electricity

Sub-domain 5.B: Enjoy adequate housing quality and security

Indicator 5.2: Housing quality and security

- Measure 5.2.1: Percentage of population living in long-term, informal settlements and slums
- Measure 5.2.2: Number of people living in shelters, refuges, refugee camps, immigration centres
- Measure 5.2.3: Number of people living in mobile accommodation and caravans
- Measure 5.2.4: Percentage of the population living in: (a) temporary accommodation; (b) rented accommodation under short-term tenancy agreement
- Measure 5.2.5: Share of total population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor

Measure 5.2.6: Rates of housing overcrowding

Measure 5.2.7: Inequality in housing quality index

Measure 5.2.8: Housing cost overburden rate

Sub-domain 5.C: Enjoy living conditions that promote independence, dignity and self-respect

Indicator 5.3: Living independently with dignity and respect

Measure 5.3.1: Percentage of disabled people living in housing lacking adaptations necessary to live independently, with dignity and respect

Measure 5.3.2: Percentage living with unmet care needs necessary to live independently, with dignity and respect by: (a) age group; (b) disability status

Sub-domain 5.D: Move around freely and enjoy access to safe and appropriate transport

Indicator 5.4: Mobility, transport and access

Measure 5.4.1 Proportion of the rural population who live within 2 km of an all-season road

Measure 5.4.2: Monthly travel costs as a percentage of monthly income

Measure 5.4.3: Percentage of population that has convenient access to public transport, by sex, age and persons with disabilities

Sub-domain 5.E: Access and enjoy green spaces and public spaces

Indicator 5.5: Quality of your local area and access to open spaces

Measure 5.5.1: Inequality in local environment quality (rubbish, pollution, noise, odour, unsocial behaviour, etc)

Measure 5.5.2: Ability to access free facilities that promote leisure and wellbeing

Measure 5.5.3: Percentage of children with access to open, green spaces for play

Sub-domain 5.F: Be able to achieve a good work-life/care-life balance

Indicator 5.6: Work-life balance

Measure 5.6.1 Satisfaction with work-life/care-life balance

Measure 5.6.2: Average minutes per day spent on leisure activities

Measure 5.6.3: Travel to work times

Domain 6. Participation, influence and voice: Inequality in the capability to participate in decision-making, have a voice and influence

Sub-domains:

- 6.A: Participate in and have influence over democratic and other decision-making processes at any territorial level, and including indigenous, customary or community decision-making processes*
- 6.B: Evidence of powerful elites with excess influence and control over decision-making processes in public and political life*
- 6.C: Participate in decision-making and make decisions affecting your own life independently within your household and family*
- 6.D: Participate in non-governmental organisations concerned with public, political and working life*
- 6.E: Have freedom to form and join civil organisations, social movements and solidarity groups, including trade unions; freedom of assembly and association and enjoy active citizenship*

The capability to participate in decision-making, have a voice and influence, affects political, social and family spheres of life. Different forms of participation covered in this domain, include, participation in democratic processes such as voting in general and local elections, the ability to join workplace associations and community action groups and involvement in decision-making in the family.

The domain includes measures designed to quantify differences in participation in various groups which include public, political and work organisations such as: community groups; residents' associations; patient groups; parent groups; student groups; passenger and consumer groups; worker associations, etc. These forms of participation are important to ensure that individuals have a voice but it is also key to measure differences in influence as well as voice. Inequality in political participation is marked by social gradients in voter turnout as well as poor representation of some groups in national and local governments. Direct measures of influence are difficult to find but survey evidence of perceived influence provide useful measures which are included in this domain.

In terms of inequality, it is recognised that it is possible for some individuals to have 'too much' influence as well as 'too little'. Too much influence by some individuals and groups can have a negative effect on other people's capabilities. There are growing concerns that economic inequality has led to political capture by elites, eroding democratic governance, influencing policy making in their favour and to the detriment

of others (Fuentes-Nieva and Galasso, 2014; Stiglitz, 2012). The relationship between economic inequalities and inequalities in the capability to participate in decision making, have a voice and influence can run both ways. This can be evidenced by: members of wealthy families having a greater likelihood of gaining positions of power and the power of donations on political parties in terms of shaping policy in particular policies related to taxation and government expenditure which are favoured by the donors (Gilens, 2012; Gilens and Page, 2014).

This domain seeks to capture these inequalities in the form of identifying links between privilege, participation and influence, corruption and evidence of powerful elites with excess influence in public and political life.

Unequal influence and power also exists within families which leads to forms of gender domination, mainly by men. The domain includes measures designed to capture inequalities in decision making in families.

Measurement considerations

It is fairly straightforward to measure the existence of groups and associations designed to involve people in decision making. Equally it is possible to quantify differences in membership of these groups or identify if the political systems have formal ways to channel the electorates' views and preferences and be accountable for that.

It is much harder to find measures of the influence the different members of those groups have on decision making. People's perceptions of influence can provide a useful indicator, where available, and reluctance to join groups may well be a reflection of (perceived) lack of influence. There is some case study evidence on the influence of citizen action on legal reforms, for example on women's rights and civil rights (Al-Sharmani, M. (ed), 2010).

Measures included in this domain are designed to measure differences in participation between individuals and groups, political capture by elites and corruption. The measures of influence extend beyond the political, public and work spheres to decision making in families.

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Domain 6: Sub-domains, indicators and measures

Sub-domain 6.A: Participate in and have influence over democratic and other decision-making processes at any territorial level, and including indigenous, customary or community decision-making processes

Indicator 6.1: Political participation

Measure 6.1.1: Percentage of the population entitled to vote for: (a) all levels of political office; (b) only some of the most powerful political positions; (c) none

Measure 6.1.2: Inequality in voter turnout in national or local elections

Measure 6.1.3: Percentage of seats in (a) national parliaments and (b) local governments by sex, age, disability status, privately educated, family background and population groups (eg ethnicity)

Indicator 6.2: Political activity

Measure 6.2.1: Percentage who have formally contacted local representatives /national government representative/political party in last 12 months

Measure 6.2.2: Percentage who have exercised their right to petition or protest in last 12 months

Measure 6.2.3: Percentage who attended a political rally, meeting or speech in last 12 months

Measure 6.2.4: Percentage who have been involved in any official consultation, town-hall meeting and/or any other official governmental practice in rulemaking (national, regional and/or local level)

Indicator 6.3: Perceived influence

Measure 6.3.1: Percentage who feel they can influence decisions affecting their local area

Measure 6.3.2: Percentage of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group

Sub-domain 6.B: Evidence of powerful elites with excess influence and control over decision-making processes in public and political life

Indicator 6.4: Political privilege and evidence of undue influence and corruption

Measure 6.4.1: Evidence of a political elite (a) political dynasties; (b) narrow educational background (particular schools/universities); (c) median wealth of elected politicians

Measure 6.4.2: Evidence of political revolving doors: (a) personnel moving between influential political positions and roles in the lobbying

industry; (b) personnel moving between roles as legislators and regulators and members of industries affected by the legislation and regulation

Measure 6.4.3: Extent of corruption: Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months

Sub-domain 6.C: Participate in decision-making and make decisions affecting your own life independently within your household and family

Indicator 6.5: Decision-making within families

Measure 6.5.1: Who makes final decisions within the family on key aspects such as where to live, children's education, work, finances, etc.: (a) decisions are made jointly; (b) decisions are made by head of family (specify gender)

Sub-domain 6.D: Participate in non-governmental organisations concerned with public, political and working life

Indicator 6.6: Participation in non-governmental organisations

Measure 6.6.1: Percentage who are a member of a local decision-making body (town/village council, local association, local education or health bodies)

Measure 6.6.2: Percentage of employees who are a member of a trade union or workplace organisation active in relations and conditions of work

Sub-domain 6.E: Have freedom to form and join civil organisations, social movements and solidarity groups, including trade unions; freedom of assembly and association and enjoy active citizenship

Indicator 6.7: Taking part in civil organizations, social movements and other social collective actions

Measure 6.7.1: Percentage active in a campaigning group, social movement or political party (can be via social media)

Domain 7. Individual, family and social life: Inequality in the capability to enjoy individual, family and social life, to express yourself and to have self-respect

Sub-domains

- 7.A: Freedom to develop as a person, maintain dignity, self-respect, self-esteem and self-confidence; freedom to express yourself*
- 7.B: Form and maintain intimate relationships, friendships and a family; enjoy independence and equality in primary relationships, including marriage, be confident that they will be treated with dignity and respect*
- 7.C: Enjoy family life, including in the context of global displacement and international migration*
- 7.D: Spend time with others including wider family and know that there is someone you can count on when help is needed*
- 7.E: Be free to enjoy a social life, engage in cultural and other valued activities (including voluntary work)*

The capability to enjoy individual, family and social life, to express yourself and have self-respect is fundamental to being able to live the type of life people have reason to value. This dimension represents an important area of life that typically does not feature in existing frameworks, highlighting the advantage of adopting the capability approach as the theoretical foundation.

People need to be free to formulate and pursue goals and objectives for themselves, to develop as a person through freedom of expression and to live without fear of humiliation, harassment, or abuse based on who they are. Not everyone is free to develop as a person in this way and important inequalities exist between different groups of people in many countries. This can have a negative impact on self-confidence, self-respect and self-esteem. Recent research has shown that roughly a quarter of the world's countries are still grappling with high levels of religious hostilities (Pew Research Center, 2015). Differences in personal resources, legal frameworks, social norms, treatment by those in authority or with care responsibilities, social recognition, and discrimination based on personal characteristics can play an important role in shaping these inequalities. Discrimination can take many forms, including discrimination based on: sexual identity (UN HRC, 2015); health status such as HIV/AIDS (Visser and Sipsma, 2013); race; gender, as well as intersectional forms of discrimination (Hill Collins and Bilge, 2016). Measures in this domain include perceptions of freedom of choice and control over the way life turns out, ability to practice religion or beliefs without facing hostility, and control over making personal decisions.

In the family and relationship sphere, the ability to form intimate relationships and a family and to enjoy independence and equality in primary relationships, underpinned by freedom in matters of sexual relations and reproduction, are all important for individual well-being. This domain includes measures to capture inequalities in autonomy with regards to primary relationships and the ability to enjoy family life in the context of global (and local) displacement and international migration.

In the social sphere, it is important to be able to form friendships, have time to spend with, and care for, friends and family and to be able to celebrate special occasions and cultural events. Equally knowing that there is someone who will look out for you and care for you in times of need is important for personal well-being. Contact with the wider community can strengthen social connections and enhance social lives. Engagement in cultural and religious practices with other members of your chosen group or groups is important for developing and maintaining cultural and religious identities. Loneliness is a risk factor for poor health and mortality (Hawkley and Cacioppo, 2010) and is more prevalent among some groups than others. The elderly, particularly those living alone are particularly at risk but rates vary between countries (Hansen and Slagsvold, 2016). Another group who are more likely to experience loneliness are migrants, especially those separated from partners and families (van de Broek and Grundy, 2017). The domain includes measures capturing inequality in these aspects of social life.

Measurement considerations

Inequality measures in this domain include perceptions (e.g. freedom of choice and control), experience (e.g. experience of religious hostility) and incidence (married at an early age (before 15 and 18 years). Some measure inequality in ordinal variables such as self-esteem, self-confidence and loneliness.

Many of the variables will not be found in official statistics but household surveys are a good source of information.

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Domain 7: Sub-domains, indicators and measures

Sub-domain 7.A: Freedom to develop as a person, maintain dignity, self-respect, self-esteem and self-confidence; freedom to express yourself

Indicator 7.1: Personal autonomy and freedom to develop as a person and live the life you choose

Measure 7.1.1: Percentage who feel able to be themselves: (a) with their family, (b) with friends, and (c) in public

Measure 7.1.2: Percentage who feel able to practice their religion or beliefs freely

Measure 7.1.3: Percentage who feel that they have freedom of choice and control over the way their life turns out

Measure 7.1.4: Percentage who feel that they have sufficient control in making personal decisions that affect their everyday activities

Measure 7.1.5: Inequality in life satisfaction

Indicator 7.2: Have freedom from stigma, harassment and discrimination; enjoy dignity and self-respect, self-esteem and self-confidence

Measure 7.2.1: Inequality in self-esteem – using, for example, the Rosenberg self-esteem scale (RSES)

Measure 7.2.2: Inequality in self-confidence

Measure 7.2.3: Inequality in the experiences of dignity and respect

Measure 7.2.4: Percentage of the population reporting having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law

Measure 7.2.5: Percentage of the population reporting that the city or area where they live a good place or not a good place to live for (a) immigrants from other countries; (b) gay or lesbian people

Measure 7.2.6: Group Grievance indicator. Discrimination, powerlessness, ethnic violence, communal violence, sectarian violence, and religious violence, measured on a scale on 0 (low pressures) to 10 (very high pressures).

Measure 7.2.7: Percentage experiencing religious hostility

Sub-domain 7.B: Form and maintain intimate relationships, friendships and a family; enjoy independence and equality in primary relationships, including marriage, be confident that they will be treated with dignity and respect

Indicator 7.3: Being able to form and pursue the relationships you want, free to make decisions on when to form and start a family, live as a family and have a say on family life

Measure 7.3.1: Percentage for whom others decide on their behalf who they form their primary relationship with

Measure 7.3.2: Percentage of women aged 20-24 years who were married or in a union before age 15 and before age 18

Measure 7.3.3: Percentage of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

Measure 7.3.4: Percentage of children who maintain contact with non-resident parent after parental separation

Sub-domain 7.C: Enjoy family life, including in the context of global displacement and international migration

Indicator 7.4: Enjoy family life in the context of global displacement and international migration

Measure 7.4.1: Percentage or number separated from family due to displacement, migration and work

Sub-domain 7.D: Spend time with others including wider family and know that there is someone who can be counted on when help is needed

Indicator 7.5: Having social support and freedom from social isolation

Measure 7.5.1: Percentage meeting relatives or friends at least once a week

Measure 7.5.2: Percentage who feel lonely

Measure 7.5.3: Percentage who in times of trouble have relatives or friends who they can count on to help when needed

Sub-domain 7.E: Be free to enjoy a social life, engage in cultural and other valued activities (including voluntary work)

Indicator 7.6: Being able to participate in key social and cultural occasions which matter to you

Measure 7.6.1: Percentage who say they have been unable to participate in important social or cultural occasions and reasons why