



# SOCIAL PROTECTION INDICATORS OF COVERAGE AND EFFECTIVENESS

A TOOL FOR SOCIAL PROTECTION ASSESSMENT

JULY 2026



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Social protection lies at the heart of inclusive and resilient development in Asia and the Pacific, but its effectiveness depends critically on the availability of reliable data and strong monitoring systems. In a region characterized by diverse and evolving risks—from demographic change to climate shocks—the ability to measure who is covered, how much support is provided, and the impact on people’s lives is essential for informed decision-making.

The Asian Development Bank (ADB) has therefore placed strengthening the evidence base for social protection at the center of its work. Since the early 2000s, ADB’s Social Protection Indicator (SPI) initiative has played a pioneering role in measuring and tracking social protection performance, providing one of the first comparable frameworks to assess the scale, distribution, and adequacy of social protection expenditures across countries. The application of the SPI has also involved the systematic collection and consolidation of data across multiple areas of social protection. This process has resulted in a uniquely comprehensive and structured database for the region.

This publication represents the next step in that evolution. The Social Protection Indicators of Coverage and Effectiveness (SPICES) framework builds on the SPI by offering a more comprehensive and consistent approach to monitoring social protection systems. It brings together indicators of inputs, outputs, and outcomes, allowing countries to connect spending and program design with results such as coverage, adequacy, and impacts on poverty and inequality.

A key contribution of SPICES is its ability to generate more policy-relevant diagnostics. By organizing indicators around population needs—such as old age, children, disability, unemployment, poverty, and health—it provides a clearer picture of how resources are distributed and where gaps remain. This helps policymakers move from aggregate spending analysis to a more targeted understanding of who benefits and how effectively different needs are addressed.

SPICES is designed as a flexible framework and practical methodology that countries can adapt to their specific contexts and priorities. Developing member countries can apply the framework in ways that best suit their data availability, institutional arrangements, and policy priorities. It can be adapted and extended, for example, by adding new dimensions, introducing further disaggregation, or developing deeper narrative analysis around specific aspects of social protection.

This work reflects ADB’s continued commitment to advancing practical analytical tools and knowledge solutions for its developing member countries. By strengthening the measurement and monitoring of social protection, the SPICES framework is expected to enhance evidence-based decision-making and policy dialogue across the region. As a flexible tool and methodology, it will support countries in generating better data, improving performance monitoring, and ultimately achieving more effective and inclusive social protection outcomes for their populations.

**Albert Francis Park**

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The Social Protection Indicators of Coverage and Effectiveness methodology, which represents a major revision of the previous approach, was developed by consultants **Ludovico Carraro** (lead author), with technical assistance from **Flordeliza Huelgas. Lydia Domingo**, senior social development officer (Social Protection), SD3-HSD, supported the publication process through technical facilitation and served as the focal point for the technical assistance that underpinned this work. **Imelda Marquez**, former associate operations officer, SD3-HSD, provided operational support to the team. The development process benefited from early support provided by **Oleksiy Ivaschenko**, senior social protection and jobs specialist, SD3-HSD.

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# ABBREVIATIONS

|        |                                                            |
|--------|------------------------------------------------------------|
| ADB    | Asian Development Bank                                     |
| GDP    | gross domestic product                                     |
| GNI    | gross national income                                      |
| ILO    | International Labour Organization                          |
| SDG    | Sustainable Development Goal                               |
| SPI    | Social Protection Indicator                                |
| SPICES | Social Protection Indicators of Coverage and Effectiveness |



# EXECUTIVE SUMMARY

The Social Protection Indicators of Coverage and Effectiveness (SPICES) is the Asian Development Bank (ADB) standardized framework for assessing the status of a country social protection system.

SPICES provides a practical, country-oriented methodology that (i) maps social protection programs to needs; (ii) quantifies the level of support and coverage of different population subgroups, highlighting gaps or the comprehensiveness of the system; and (iii) links such outputs to their effects on inclusion and poverty reduction.

Indicators in SPICES are organized into three levels: inputs, outputs, and outcomes/impacts.

The main inputs are the level and structure of government expenditure on social protection, whereas outputs consider the average expenditure per beneficiary and coverage. These dimensions are estimated using different measures and disaggregated by needs: old age, children/family, disability, unemployment/underemployment, poverty/vulnerability, and health. Outcomes indicators are obtained from household survey analysis and primarily focus on the simulated impact of social protection on reducing poverty and inequality.

The SPICES framework and indicators are designed to be intuitive for policymakers, comparable across countries and over time, and immediately usable for diagnostics and dialogue.

Many institutions provide data on social protection, including the International Labour Organization's Statistics on Social Protection and the World Bank's ASPIRE database, and the Sustainable Development Goals (SDGs) have catalyzed greater data availability. Nevertheless, significant regional gaps remain in the consistency of social protection measures across countries in Asia and the Pacific.

ADB's Social Protection Indicator (SPI) initiative—launched in 2004 and published for Asia in 2008—was one of the first attempts to systematically address these measurement challenges. This exercise predated the International Labour Organization's first World Social Protection Report (2010) and the World Bank's 2014 Safety Net Report. SPICES builds on and expands this earlier analytical effort.

The SPICES framework aims to provide such consistency. Without preset judgments about the type and composition of social protection instruments, it takes these into account as inputs and focuses on their outputs and outcomes. In doing so, SPICES extends the conceptual foundations of the original SPI exercise and broadens the analysis to systematically assess needs, outputs, and outcomes. Methodologically, SPICES represents a shift from the previous emphasis on disaggregating social protection by program category—social insurance, social assistance, and active labor market programs—toward an assessment organized around the types of needs that social protection addresses.

One of the key output indicators within the SPICES framework is the SPI. It is a specific quantitative indicator that captures the level of expenditure per intended beneficiary. It is derived by multiplying two components: the average expenditure per beneficiary and the potential coverage of intended beneficiaries.

Importantly, the SPI is disaggregated by needs. The SPI provides a clearer and more comparable measure of social protection performance than simple spending-to-gross domestic product ratios by showing the average support delivered per intended beneficiary, and—when disaggregated—revealing how resources are distributed across distinct needs and population groups.

Other important output indicators include a comprehensiveness index, which assesses the extent to which social protection programs address in a balanced way the different needs of the population, the focus on vulnerable groups, and the level of protection against risks.

The SPICES approach has the following strengths:

- The development of a comprehensive framework for the assessment of social protection, looking at a set of indicators organized into three pillars: inputs, outputs, and outcomes/impacts of social protection.
- An embedding of the SPI indicator within the SPICES output pillar, and a methodological revision so that the SPI can be disaggregated across needs for social protection interventions. This should provide relevant results for policymakers.
- The calculation of a specific indicator of comprehensiveness of social protection, or to what extent social protection is developed to address social protection needs, both through visual representations and an actual numerical indicator.
- A rigorous assessment of health expenditure in reducing health-related financial risks.
- An assessment of countries' development of shock-responsive social protection as part of the SPICES output pillar.
- Whenever available and accessible, the use of household survey microdata to provide information on potential impacts. This constitutes the impact pillar and provides simulated effects of social protection on poverty and inequality, as well as measures of the reduced effect of risks.

This document describes the SPICES methodology and provides practical guidelines for conducting the SPICES assessment: identifying relevant social protection programs, collecting administrative data on expenditure and beneficiaries, and analyzing household survey data to compute outcome indicators.

The SPICES analysis can be used to produce country reports assessing the social protection system and short country profiles. It is also expected that once a set of country assessments is completed, the use of a common framework will enable regional analysis of the status of social protection in Asia and the Pacific, as well as ad hoc analysis of specific social protection issues emerging from cross-country comparisons.



# INTRODUCTION

1

The inclusion of social protection in the Sustainable Development Goals (SDGs) has been a substantial incentive for improving social protection statistics, including in Asia and the Pacific. However, gaps remain: There is a lack of consistent assessments and an emphasis on assessing social protection through specific programs and their delivery rather than focusing on needs.

The difficulty stems from the diverse level of development of social protection across countries in Asia and the Pacific, as well as different paradigms and understanding of social protection.

The development of the Social Protection Indicators of Coverage and Effectiveness (SPICES) aims to address gaps and inconsistencies by creating an intuitive, effective framework that looks at inputs, outputs, and outcomes of social protection. It examines expenditure on social protection, its composition as inputs, and then focuses on its outputs and impacts.

Such a framework allows the analyst to compare countries at different stages of development that adopt different instruments, focusing on the ultimate results and goals of social protection. The development of a consistent framework of assessment supports dialogue and comparisons across countries, creates learning opportunities, and provides a powerful diagnostic tool for each country's social protection system.

SPICES builds on 2 decades of work by the Asian Development Bank (ADB) with the Social Protection Indicator (SPI). While the earlier SPI provided a single, regionally comparable measure, SPICES embeds the revised SPI within its output pillar and extends the assessment to include inputs and outcomes, using a needs-based lens and clearer signposting for policy audiences. The SPI enhances cross-country and over-time analysis by capturing the average support provided per intended beneficiary relative to gross domestic product (GDP) per capita, and—when disaggregated—shows how resources are distributed across distinct needs and population groups.

ADB—through the SPI—has been a long-standing pioneer in assessing social protection development across Asia and the Pacific. The SPI origins date to 2004, when the social protection system of six Asian countries (Bangladesh, Indonesia, Mongolia, Nepal, Pakistan, and Viet Nam) was the focus of in-depth studies that became the basis of the creation of a social protection index<sup>1</sup> for Asia and the Pacific countries.<sup>2</sup>

<sup>1</sup> The first publications referred to a Social Protection Index, but after the revised methodology, the SPI is an indicator, and since the 2016 SPI publication, the name has changed to Social Protection Indicator.

<sup>2</sup> B. Baulch, A. Weber, and J. Wood. 2008. [Social Protection Index for Committed Poverty Reduction](#). Volume 2: Asia. ADB.

Subsequently, the approach was revised and improved, and since then, efforts have focused on improving data quality and analyzing different aspects of social protection, such as the inclusion of people with disabilities or the social protection response to the coronavirus disease (COVID-19) pandemic.<sup>3</sup>

The development of SPICES is yet another stage in ADB's efforts to support countries in Asia and the Pacific in assessing and, therefore, understanding the role of social protection.

The SPICES methodological approach consists of two main blocks: the identification and classification of social protection programs, and then the subsequent production of indicators organized into inputs, outputs, and outcomes.

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<sup>3</sup> ADB. 2011. [\*The Revised Social Protection Index: Methodology and Handbook\*](#).

# SOCIAL PROTECTION AND ITS PROGRAMS



Before presenting the SPICES framework, it is important to clarify what is meant by social protection, identify the types of programs that fall within its scope, and outline how these programs can be classified into critical dimensions for analysis.

## 2.1 Defining Social Protection

There is no internationally accepted definition of social protection, and because countries have different understandings of it, key functions are scattered across ministries and departments. The first step in analyzing a social protection system is to identify the programs that are part of it and classify them.

The ADB Strategy 2001 defines social protection as “the set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people’s exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption or loss of income.”<sup>4</sup> In addition, contemporary approaches to social protection emphasize life-cycle protection, universal and rights-based coverage, resilience to economic and climate-related shocks, the integration of social services alongside income support, and the need for adaptive systems capable of responding rapidly to emerging risks and vulnerabilities.<sup>5</sup>

Social protection programs address life-cycle risks and consequent needs, such as old age and childhood. Moreover, social protection supports people with disabilities and addresses the needs of the poor and vulnerable groups. The ADB definition also clearly refers to active labor market programs since these tend to reduce the length of possible periods of unemployment and underemployment. There is a clear mention of the role of social protection in reducing exposure to risks and mitigating their financial impacts. Health-related risks—particularly those that lead to significant and unpredictable financial burdens—are among the most critical risks faced by households. Measures that pool risks and resources to protect individuals from catastrophic health expenditures are therefore well aligned with the core objectives of social protection.<sup>6</sup>

For a program to be classified as part of social protection, two elements are required: (i) the provision of a cash transfer or an in-kind benefit to directly increase people’s consumption or income, and (ii) the presence of certain characteristics of the intended beneficiaries. Characteristics of intended beneficiaries must identify the presence of an adverse risk or vulnerability related to life-cycle risks, disability, unemployment, poverty, social exclusion, and health financing risks.

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<sup>4</sup> ADB. 2001. [Social Protection Strategy](#).

<sup>5</sup> International Labour Organization (ILO). 2024. [World Social Protection Report 2024–26: Universal Social Protection for Climate Action and a Just Transition](#); and World Bank. 2025. [State of Social Protection Report 2025: The 2-Billion-Person Challenge](#).

<sup>6</sup> It should be noted that health is also included in the ILO definition of social protection.

The attention is on government-supported social protection, meaning that social protection programs can be run by the government, regulated by the government, or also be autonomous bodies, but must provide “collective arrangements” and exclude any “simultaneous reciprocal arrangement.” The collective nature of programs is important to ensure a sense of solidarity. This applies specifically to insurance schemes in which contributions do not reflect the risk faced by the individual, a feature that could be provided by a private, individual scheme. For example, while social health insurance charges the same premium for everyone, regardless of age or health conditions, private health insurance would charge higher premiums to older people or those affected by certain chronic illnesses. Furthermore, excluding simultaneous reciprocal arrangements avoids the inclusion of benefits that are part of work retribution. For example, an employer might offer housing benefits, provide transportation, or offer meals while a person is working for them. These are all parts of a salary package and an exchange between the employer and the employee that occurs while the person is working, so they are not social protection.

Other important exclusions from the scope of social protection are formal educational training and technical education (from preschool education to general, vocational, and higher education), as well as microfinance, private personal insurance mechanisms, or interhousehold transfers.<sup>7</sup>

Education programs are an important investment in people’s well-being and in providing better chances to participate in the labor market, but they fall under a clearly separate sector and are not considered social protection by any international organization. This also excludes special education for children with disabilities when it consists exclusively of a different form of providing education, but remains within the education sphere. Microcredit finance programs are excluded because they do not entail the provision of cash transfers or in-kind services; instead, they involve incurring a liability. Private insurance mechanisms lack the fundamental requirement of a collective agreement, which involves a solidarity element, a distinctive feature of what characterizes social protection.

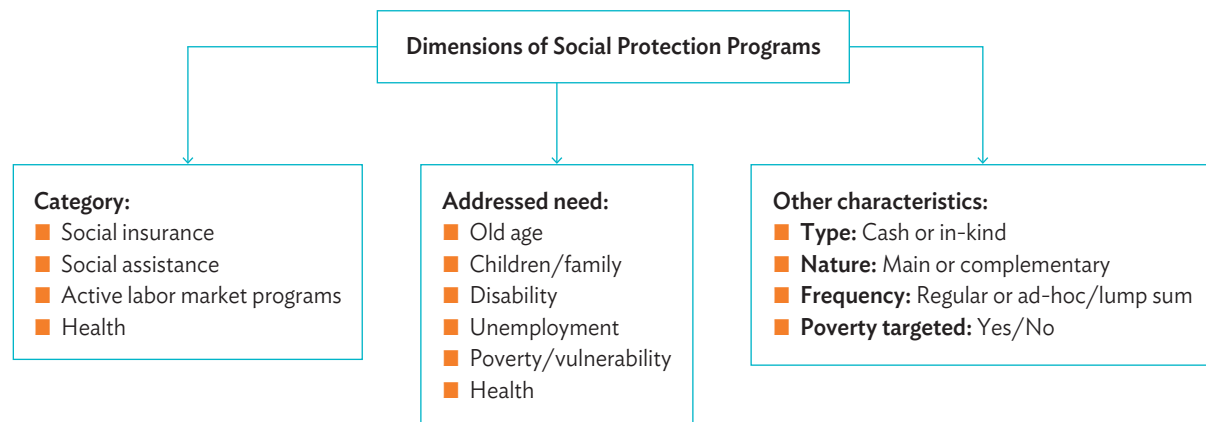
## 2.2 The Classification of Social Protection Programs

Once social protection programs are identified, the SPICES approach first classifies them across three main dimensions: category, need, and other characteristics. These dimensions are summarized and depicted in Figure 1 and necessitate some further explanation.

The category dimension refers to social insurance, social assistance (including social care services), active labor market programs, and, separately, government health expenditure. This simple distinction describes the financing mechanism of social protection programs and their main orientation. Programs are categorized as social insurance when entitlement to these benefits is based on contributions to an insurance scheme. This can happen through mandatory contributions for people who are formally employed or through voluntary contributions. Contributory history and individual contribution levels partly determine the benefit received, but there are also elements of redistribution, for example, in payments for accidents or disability.

<sup>7</sup> Technical and vocational education and training is considered part of social protection when delivered as an active labor market program that enhances employability, supports labor market transitions, and reduces vulnerability to job-related risks. Technical and vocational education and training is not considered social protection when it functions primarily as part of the education sector, rather than as an intervention to mitigate labor market risks.

**Figure 1: Classification of Social Protection Programs Based on Category, Need, and Other Main Characteristics**



Source: Author.

Unlike social insurance, social assistance programs are not based on contributions; they are instead defined as noncontributory. They usually involve programs to support poor, marginalized, and disadvantaged groups among the population. A third category is active labor market programs, whereby the defining rule is not the basis of the entitlement (contributory or noncontributory), but the nature and scope of the support, which is supporting people in finding employment or better employment by offering job search services and matching hiring firms with people in search of work, targeted skills training, food, or cash-for-work. Finally, health care is also independent of the way support is provided, contributory or noncontributory, and focuses on access to health care without the need to incur its full cost, and so being financially protected.

The second key classification reflects the type of need being addressed and the population group concerned, as expressed through the program's primary function. There are six main identified needs: old age, children/family, disability, unemployment/underemployment, poverty/vulnerability, and health, and their basic rationale is discussed in this report. They can be analyzed separately, but they are fundamentally interrelated (Figure 2).

Needs related to old age concern the increasing inability to work and thus require alternative sources of income. Children's needs stem from their obvious inability to work at a young age and their dependence on their parents. Needs associated with disability reflect the presence of disability-related costs that hinder participation and social inclusion. Unemployment and underemployment identify a situation where people are unable to find work or enough work and thus require some form of support to protect them from a lack of income and to find job opportunities. Interventions to address poverty, social exclusion, and/or vulnerability aim to ensure that everyone in the country reaches a minimum standard of living, preventing destitution and exclusion, and addressing health needs, ensuring that no one faces the prospect of inability to pay for health-related needs.

**Figure 2: Areas of Need Requiring Social Protection**

Source: Author.

In the categorization of social protection programs, it is also useful to capture other characteristics of social protection programs:

- (i) The **type** of program—whether it is provided in cash or in-kind; for example, a cash transfer in the form of a child benefit or social pension, or an in-kind transfer, such as skills training for the unemployed or physical therapy sessions for certain people with disabilities.
- (ii) The **nature** of the program—whether it is a main program or a complementary (top-up) program; for example, people receiving social pensions who are 70 or older might be entitled to an extra payment during the winter months. Such extra help is based on the receipt of an already existing payment.
- (iii) The **frequency** of the program—whether its support has some regularity (a cash transfer paid monthly or annually) or is provided on a one-off basis under specific circumstances.
- (iv) Whether the benefit is **poverty targeted**—i.e., whether it is based on an income test or other tests assessing the welfare and financial circumstances of the household (means-tested or proxy-means-tested).

Table 1 shows the classification by category and the need for the most common social protection programs. In identifying programs relevant to addressing a certain need, what matters is not the mechanism by which expenditure is financed, but the program's objective, whether it addresses the identified need, and who the beneficiaries of those programs are. Both social insurance and social assistance mechanisms address needs related to old age, children/family, unemployment, and disability. The poverty and vulnerability needs are only found within social assistance; active labor market programs address the unemployment need; and health programs address the health need, regardless of the contributory or noncontributory insurance mechanism.

**Table 1: Typical Social Protection Programs by Addressed Needs**

| Category                            | Need                  | Programs (Cash and In-Kind Benefits and Targeted Subsidies)                                                                                                                                                                                                                     |
|-------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Social Insurance</b>             | Old age               | Contributory pensions (old age, survivors), provident funds, retirement withdrawals                                                                                                                                                                                             |
|                                     | Children/family       | Maternity/paternity benefits provided through the contributory system                                                                                                                                                                                                           |
|                                     | Unemployment          | Unemployment allowances provided through the contributory system, redundancy or severance payments, and sickness or employment injury benefits                                                                                                                                  |
|                                     | Disability            | Social insurance disability pensions and benefits specifically provided to face disability-related costs                                                                                                                                                                        |
| <b>Social Assistance</b>            | Old age               | Social pensions, old-age allowances, and other benefits targeting older people (e.g., social care services)                                                                                                                                                                     |
|                                     | Children/family       | Child and family welfare transfers (e.g., child benefits, foster-care benefits, birth grants)                                                                                                                                                                                   |
|                                     | Unemployment          | Noncontributory unemployment benefit                                                                                                                                                                                                                                            |
|                                     | Disability            | Noncontributory disability pensions and allowances, benefits, and services specifically provided to face disability-related costs; in-kind benefits, such as services and concessions, caregiving allowances                                                                    |
|                                     | Poverty/vulnerability | Other social assistance not elsewhere classified: social assistance for poor households/vulnerable groups, scholarships for low-income groups or certain minority groups, health assistance in the form of unconditional cash transfers, housing programs for vulnerable groups |
| <b>Active Labor Market Programs</b> | Unemployment          | Job search services, targeted skills training, job placements                                                                                                                                                                                                                   |
| <b>Health</b>                       | Health                | Government health expenditure for inpatient health care, outpatient health care, medicines and/or pharmaceutical products: government financing arrangements and compulsory health insurance                                                                                    |

Source: Author.

The classification must be exhaustive: All social protection programs must be classified into one of the categories and one of the listed needs so that all social protection expenditure is mapped against such classification.

Within children/family needs, there are welfare transfers to children and families, and also maternity and paternity benefits, since these implicitly support the newborn and the family. Programs for unemployment needs are provided through social insurance and social assistance, as well as through active labor market programs. More controversial is the inclusion of sickness and employment injury benefits under the “unemployment need.” The rationale is that these are like unemployment benefits for people who do not work, so they can be considered as a response to protect employment and prevent unemployment. However, it should be recognized that this is not the classic categorization of this type of benefit, which is treated separately in other international classifications.

Programs addressing the needs of people with disabilities include disability pensions, specific extra support for children and older people because of their disability, caregiving allowances, and in-kind benefits such as services and concessions. All other social assistance and social services programs that could not be classified in earlier needs should be included among the poverty/vulnerability function. Programs usually included here are poverty benefits, food stamps, transfers for people living in remote or disadvantaged areas, support for ethnic minorities, and support for displaced populations. Cash health assistance to certain vulnerable groups is not directly related to the provision of an in-kind health-care service.

Health programs include government health expenditure through government financing arrangements and compulsory health insurance. Moreover, if health assistance for in-kind benefits is provided as a reimbursement expenditure by a government agency other than the Ministry of Health, it should also be captured here (Table 1) (section 4.1).

# THE SOCIAL PROTECTION INDICATORS OF COVERAGE AND EFFECTIVENESS FRAMEWORK OF SOCIAL PROTECTION ASSESSMENT

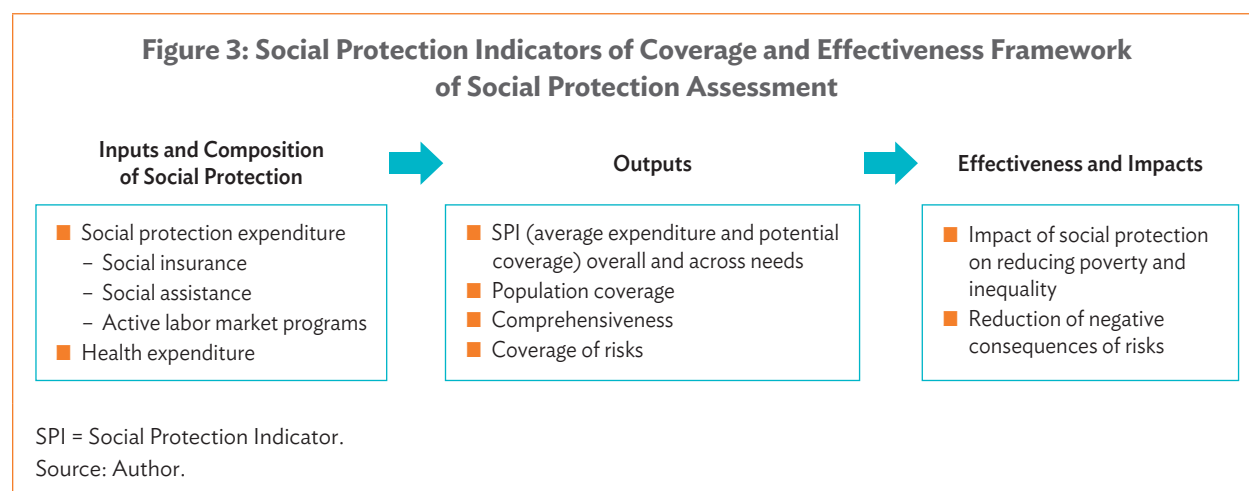


Any social protection system can be analyzed using the SPICES framework, which looks at how expenditure (inputs) is transformed into certain outputs, which in turn result in certain outcomes and impacts.

The SPICES framework is based on the distinction between three levels of indicators:

- (i) **Inputs:** level of social protection expenditure and its composition in terms of social insurance, social assistance, active labor market programs, and health. Expenditure can be measured in absolute terms, as a percentage of GDP, and as a percentage of government expenditure.
- (ii) **Outputs:** average expenditure per beneficiary, potential coverage, SPI (expenditure per intended needs), comprehensiveness across different social protection functions, and coverage of employed people making social insurance contributions and protection against risks related to covariate shocks and the adaptability of the social protection system to respond to such shocks.
- (iii) **Outcomes:** poverty and inequality reduction due to social protection; impacts demonstrating better management of risks (for example, reduced out-of-pocket health expenditure, reduced catastrophic or impoverishing health expenditure, reduced food insecurity); better social inclusion and participation among vulnerable groups (reduction of gaps between vulnerable groups and the rest of the population).

This basic structure of SPICES is depicted in Figure 3. The SPICES framework is sufficiently generic to accommodate diversity in social protection systems across the region.



The social protection system in country A, compared to country B, might prioritize social insurance over social assistance, use different targeting approaches, or employ different health financing mechanisms. It is of interest to see how these different mechanisms produce outputs on coverage and average benefits, and even more importantly, how they influence key outcomes and impacts in terms of poverty reduction and social inclusion.

### 3.1 Inputs and Composition of Social Protection Expenditure

Inputs include financial and other resources used for social protection, along with a description of the specific design of the social protection system and the mechanisms used to achieve its objectives. For inputs, there are no strict preassigned targets for levels or expectations regarding the desirable composition of social protection mechanisms (social insurance, social assistance, and active labor market programs). For example, there is no preassigned target for the level of expenditure for social insurance versus social assistance, or for active labor market programs. How coverage of the unemployed and underemployed is achieved through different programs and schemes is a country choice, but what matters is that these groups are contained in size, and poverty among low-work-intensity households is minimized.

Apart from the composition of social protection by categories, the input indicators are social protection expenditure as a percentage of GDP and as a percentage of government expenditure.

The level of social protection expenditure as a percentage of GDP can be compared to countries with similar income levels and with countries in the same region. Moreover, it is useful to observe changes in these indicators over time. There is some complementarity in the information provided by the social protection expenditure as a percentage of government expenditure and GDP. For example, in a situation of rapid economic growth, social protection might decrease as a percentage of GDP; however, as a percentage of government expenditure, government priorities can be better assessed.

### 3.2 Outputs

The main outputs of social protection are the average expenditure per beneficiary and population coverage. These indicators can be measured across population groups and by the type of programs. Among the outputs, the SPI is also presented to better assess social protection expenditure in relation to the social protection needs of each country.

In SPICES, outputs include the following indicators:

- (i) SPI and its composition: average expenditure per beneficiary and potential coverage;
- (ii) Estimates of population coverage from household surveys;
- (iii) A measure of comprehensiveness of social protection;
- (iv) The disaggregation of social protection expenditure by poverty, sex, and disability; and
- (v) The theoretical protection of other risks, in particular disasters and climate change.

## The Social Protection Indicator: Average Expenditure (Depth) and Potential Coverage (Breadth)

### The SPI as a Core Output of SPICES

Within the SPICES framework, the SPI is the core output indicator used to assess how social protection expenditure translates into support for people with different types of needs. Rather than reporting total spending alone, the SPI measures the average level of expenditure per intended beneficiary, expressed as a percentage of GDP per capita. This provides a clearer measure of the intensity of social protection support than simple spending-to-GDP ratios, because it standardizes expenditure relative to both beneficiary population size and national income levels.

A significant methodological enhancement introduced under SPICES is that the SPI is fully disaggregated by needs rather than reported as a single, aggregated figure. For each of the six needs, the indicator divides expenditure by the intended population and derives need-specific SPI values. Disaggregation allows policymakers to see overall trends as well as which areas are relatively well supported and where gaps remain. Rather than measuring overall expenditure alone, the SPI reflects expenditure relative to a country's actual social protection needs, highlighting imbalances—such as generous old-age spending alongside limited support for unemployment or disability—and supporting more targeted policy analysis and identifying areas of potential reform.

Box 1 highlights the two main advantages of the SPI: (i) its ability to standardize overall support across countries, and (ii) its capacity to show how resources align with specific social protection needs.

#### Box 1: Analytical Value of the Social Protection Indicator: System-Level Comparison and Needs-Based Diagnostics

Even in aggregate form, the Social Protection Indicator (SPI) offers a much more meaningful measure of social protection effort than traditional indicators, such as total social protection expenditure as a share of gross domestic product. By linking expenditure to the size of the intended beneficiary population and expressing average support as a share of gross domestic product per capita, the SPI adjusts for demographic structure and national income levels, allowing countries to compare the intensity of their social protection support even when overall expenditure levels, system scale, or financing arrangements differ.

When the SPI is disaggregated by need, it provides a much deeper diagnostic by showing how expenditure aligns with the specific risks and population groups that social protection systems are meant to address. The SPI examines six core social protection needs—old age, children/family, disability, unemployment/underemployment, poverty/vulnerability, and health—and links each one to its corresponding intended beneficiary group, such as older people, children, people with severe disabilities, unemployed or underemployed workers, people living in poverty, or the entire population in the case of health.

By relating expenditure to the size of these groups, the SPI adjusts for differences in demographic structure, poverty incidence, disability prevalence, and labor market conditions across countries. This ensures that spending is interpreted in proportion to the scale of need, rather than as a single undifferentiated total that may conceal underinvestment in specific areas. As a result, the need-disaggregated SPI highlights whether resources are directed to the groups for whom they are intended and reveals imbalances—such as strong support for old age but relatively weak support for unemployment or disability—greatly enhancing its value for policy analysis.

Source: Author.

## Components of the SPI: Average Expenditure (Depth) and Potential Coverage (Breadth)

The SPI comprises two analytical dimensions. The first is **average expenditure**, also referred to as **depth**, which reflects the average level of spending received by beneficiaries of programs associated with each need. This is calculated by dividing total expenditure by the number of beneficiaries and then normalizing that value by GDP per capita. SPICES adopts the term average expenditure rather than adequacy, since adequacy requires an assessment of the conditions and needs of the recipient and the extent to which these are addressed. Measures of adequacy are assessed separately under the outcomes and impacts pillar.

The second dimension measures **potential coverage** (or **breadth**), referring to the share of the intended population that could be reached based on administrative data. It is called **potential** coverage because administrative data do not always allow us to verify precisely whether every recorded beneficiary fully belongs to the program's intended target group. SPICES, therefore, distinguishes this measure from **actual coverage**, which is typically estimated using household surveys and reflects who truly received support. Potential coverage provides an indication of **the reach the system is capable of delivering**, given existing administrative information, rather than a definitive measure of who actually benefited.

The SPI combines these two components—breadth and depth—by multiplying them to obtain a single indicator that reflects the average expenditure per expected need. This dual component formulation reveals a balanced picture of system performance. It shows whether support levels are meaningful relative to national income and whether the number of beneficiaries is sufficient to cover the populations facing different risks and vulnerabilities. A country might have high potential coverage but very low average expenditure, reaching many people with limited support, while another might provide a relatively high per-beneficiary expenditure but reach a small share of the intended population. The SPI makes these tradeoffs explicit and helps identify where systems may be overstretched, inequitable, or excessively concentrated.

## SPI Computation Steps

Mechanically, the SPI adjusts for the size of population groups needing support as follows:

- (i) Intended beneficiaries are defined for each need (Table 2): pension age population, children (0–14 or up to 18 where relevant), unemployed plus time-related underemployed, people with severe disabilities, people below the national poverty line or relative poverty line (60% of median consumption/income), and the total population for health.
- (ii) Programs are classified by need, and their actual beneficiaries and expenditure are compiled, avoiding double counting by distinguishing main versus complementary or add-on benefits.
- (iii) Two indicators are computed by need: potential coverage (actual beneficiaries divided by intended beneficiaries) and average expenditure (expenditure divided by actual beneficiaries), with average expenditure normalized by GDP per capita. The SPI component by need is the product of potential coverage (breadth) and normalized average expenditure (depth). Aggregation across needs uses weights equal to the share of intended beneficiaries in the total intended population (computed with and without health), ensuring the SPI reflects the actual size of each need group in the country.

**Table 2: Intended Beneficiaries for Social Protection Needs**

| Need                  | Intended Beneficiaries                                                                                  |
|-----------------------|---------------------------------------------------------------------------------------------------------|
| Old age               | Population aged 60+ or according to country thresholds of pension age                                   |
| Children/family       | Children 0–14 or higher if country has higher thresholds (but never higher than 18)                     |
| Unemployment          | Unemployed + time-related underemployed (ILO)                                                           |
| Disability            | All people with severe disabilities <sup>a</sup>                                                        |
| Poverty/vulnerability | People below the official poverty line or people below 60% of the median income/consumption expenditure |
| Health                | Total population                                                                                        |

ILO = International Labour Organization.

<sup>a</sup> Severe disabilities exclude mild disabilities that are unlikely to require specific government support.

Source: Author.

## ► Defining Intended Beneficiary Populations

After classifying programs and their expenditure by need, the next step in constructing the SPI is to match each need with its corresponding population group. This requires identifying the intended beneficiaries for each need (Table 2).

For some needs, the correspondence between needs and intended beneficiaries is relatively straightforward. For example, for old age, the intended population is people over pension age, which can be compared with those receiving support from programs classified in this need. By default, people receiving contributory pensions and social pensions should be contained in the intended population (note, however, that this is not the case if people receive more than one type of pension and are counted more than once or if people receive pensions before pension age). Similarly, for children/family needs, the intended population is the children's population; and for the disability need, it is the number of people with severe disabilities. However, in cases of unemployment, poverty, or vulnerability, the choice of intended beneficiaries can be more contentious.

For unemployment, the intended beneficiaries are the unemployed and those who are underemployed and looking for more work (these are people employed part-time who would be willing and available to work more).<sup>8</sup> In this case, there are many exceptions in which recipients of social protection programs addressing the unemployment need might be people beyond the intended beneficiaries. For example, beneficiaries of active labor market programs might not be unemployed or underemployed, as they may simply be seeking to change jobs or improve their skills and be included in active labor market policies.

For the poverty/vulnerability need, the reference population is those below the official poverty line or the relative poverty line. However, by design, some programs classified as addressing social exclusion and vulnerability might target people other than those just below the poverty line—for example, internally displaced populations, war veterans, or ethnic minorities that are seen in the country as deserving support but might not be falling below the poverty line. In such cases, the numerator might not be a subset of the denominator.

<sup>8</sup> This concept of time-related underemployment is based on the measure proposed by the 19th International Conference of Labour Statisticians and is usually measured through labor force surveys.

Nevertheless, even in the case of unemployment and poverty/vulnerability, the comparison is between social protection programs with those objectives and the people theoretically in need of that support.

For health, the intended population is the whole population in the country. In this case, the intended population is defined differently, since the intended protection is for a risk rather than a need. Intended beneficiaries are the whole population, provided a health need arises. However, this is difficult to measure and not very meaningful if removed from the type of health need. This is often coupled with the subsequent challenge of identifying the number of beneficiaries of government health expenditure. Therefore, unless specific data on health are available, it is not necessary to report the number of actual beneficiaries of government health expenditure.

### ► Core Indicators for SPI Construction: Average Expenditure and Potential Coverage

Once programs are classified into needs and information is collected on program expenditures, the number of beneficiaries, and the size of the different groups of intended beneficiaries, two important indicators can be computed:

- (i) The **average expenditure**, which is the division between the social protection expenditure and the number of beneficiaries; and
- (ii) The **potential coverage of intended beneficiaries**, which is the division between the number of beneficiaries and the intended beneficiaries of social protection interventions.<sup>9</sup>

These two indicators can be computed for each need (except health) and across needs as a total. Moreover, when multiplied by each other and expressed as a percentage of GDP per capita, the result is the SPI: the average level of expenditure per social protection need as a percentage of GDP per capita.

### ► Constructing SPI Indicators Across Needs

While the same person can have more than one need, the same expenditure can never be reported more than once. Therefore, a program and its social protection expenditure must usually be allocated only to one of the needs.<sup>10</sup> The categorization of a program by need is sometimes not straightforward, and section 4.1 provides more explanations, rules, and examples of how this should be implemented in practice.

When the SPI is aggregated, each need takes a relative weight based on the size of the intended population. While disability and unemployment tend to have relatively small contributions, health will normally take more than 50% of the weight. Given that the reference population for health is the total population and the limitations in collecting the number of beneficiaries of health expenditure, the overall SPI should be computed with and without health.

Another consideration is that, given the different kinds of needs, the average expenditure is expected to differ across them. For old age and, to some extent, disability, the expectation is that average expenditure replaces the lack of income; for other needs, the average size can be significantly smaller since support is limited to complementing other income sources.

<sup>9</sup> For consistency across all needs, the numerator is capped to the maximum amount of the denominator so that potential coverage does not exceed 100%. Note that in such a case, the average expenditure would also compute the average amount that is potentially provided to the eligible population and not the actual average transfer of such programs.

<sup>10</sup> There could be cases where expenditure under one program is split under different needs. This does not result in duplication but rather assigns a specific expenditure percentage or component to different needs based on the composition of beneficiaries or the different objectives of the program.

Regardless of whether the average expenditure is expressed as a percentage of GDP per capita, it is obtained by dividing the expenditure by the number of recipients. For this reason, in the same need, it is important to avoid counting the same beneficiaries twice. This is done by distinguishing the nature of the programs and whether they are main or complementary interventions.<sup>11</sup>

It is important to highlight that, within the SPICES framework, the SPI started to put emphasis on needs. For those familiar with the previous definition and calculation of the SPI, Box 2 provides a summary of the main changes.

### Box 2: Summary of the Main Enhancements in the Social Protection Indicator

The Social Protection Indicator has made three significant methodological refinements:

- (i) **Emphasis on social protection needs.** Focus has shifted from the category of social protection expenditure (social insurance, social assistance, and labor market programs) to the needs addressed by social protection programs: old age, children/family, disability, unemployment/underemployment, poverty/vulnerability, and health. Compared with the categorization of social protection expenditure, needs are more relevant from a policy perspective and are therefore easier for policymakers to relate to.
- (ii) **A more comprehensive measure of health expenditure.** Health-related risks are among the most common risks people face, and access to health-care services and financial protection is considered a need to which the entire population should be entitled. Unlike in previous computations, regardless of the financing modality, all government health-care expenditure for inpatient health care, outpatient health care, and medicines and pharmaceutical products is now included in social protection. Moreover, health protection is a separate need addressed through government health expenditure, with the intended beneficiaries being the entire population.
- (iii) **Enhancement of the definition and measurement of some of the intended beneficiaries.** These beneficiaries refer to the underemployed, poor and vulnerable, old age, and children. The definition and measure of the underemployed are based on relatively recent improvements in labor statistics and, in particular, the resolution adopted at the 19th International Conference of Labour Statisticians on statistics of work, employment, and labor underutilization. The new measure of underemployment is time-related and considers both the willingness to work and the availability to work more when people work part-time. The denominator of people potentially in need of support is the sum of the unemployed and time-related underemployment. The definition of poor and vulnerable not only considers people below the official poverty line but also an alternative relative measure: people falling below 60% of the median consumption and/or income. The reason for an alternative measure is to enhance international comparability, given that national poverty lines can be fixed following very different criteria. For older adults, the standard definition is people aged 60 or older; and for children, those under 15 (population aged 0–14). However, such thresholds can be amended based on specific national thresholds adjusted to each country, determined by the pension age for older people; or for children, the threshold can be increased if the school-leaving age is higher than 15 and support is provided to other children under 18.

Source: Author.

<sup>11</sup> For example, whenever within a program a subgroup of beneficiaries is entitled to supplementary support, the expenditure should be summed up, but the number of beneficiaries remains the same and is the one associated with the main benefit. Particular attention should be given to in-kind benefits, which can be provided as supplements to a program.

## Formulas for the Computation of the SPI

The SPI is computed by summing all program expenditures for each need and dividing by the sum of the intended beneficiaries across all needs. When health is included, by default, the total reference population exceeds the total population. However, the total reference population depends on the country's specific demographic profile and needs. This amount is then standardized by expressing it as a proportion of GDP per capita. Therefore, the overall formulation of the SPI is as follows:

$$SPI = \frac{(Total\ expenditure / Total\ reference\ population)}{GDP_{per\ capita}}$$

Based on the categorization of Table 1 and Table 2, it is possible to compute the potential coverage of the population having a certain need (actual beneficiaries divided by intended beneficiaries) as well as the average expenditure, measuring overall expenditure for those benefits and dividing by the number of actual beneficiaries (the average expenditure is divided by the GDP per capita to standardize and compare measures over time and across countries).

This means that for each need, an SPI component can be computed. For the need  $i$ , the SPI would be computed as follows:<sup>12</sup>

$$SPI_i = Breadth_i \times Depth_i = \left( \frac{Actual\ Beneficiaries_i}{Intended\ Beneficiaries_i} \times \frac{SP\ Expenditure_i}{Actual\ Beneficiaries_i} \right) / GDP\ per\ capita$$

For example, if the need under analysis is old age, the relevant SPI will consider beneficiaries of pensions and old age allowances, the social protection (SP) expenditure for the relevant benefits and services (e.g., pensions, old age allowances), and the people above pension age as the intended beneficiaries.

There is a different SPI component for each of the six needs: old age, children, unemployment, disability, poverty/vulnerability, and health.

The total SPI will be computed as the weighted sum of the SPI needs. This can be expressed as follows:

$$SPI_i = \sum_i SPI_i \times w_i = \left( \frac{SP\ expenditure}{Sum\ of\ all\ intended\ beneficiaries} \right) / GDP\ per\ capita$$

where  $w_i$  is the weight of need  $i$ , which is equal to

$$w_i = \left( \frac{Intended\ beneficiaries_i}{Sum\ of\ all\ intended\ beneficiaries} \right)$$

## Estimates of Population Coverage from Household Surveys

An alternative measure of coverage can be computed using data from household surveys, where the indicator ascertains whether a person or household is in receipt of social protection benefits. Whenever household surveys that collect the required information are available, these will also be analyzed to provide estimates of social protection coverage of the population and different subpopulation groups.

<sup>12</sup> The depth indicator incorporates the division by the GDP per capita to standardize the measure of the average benefit.

A significant difference between estimates of potential coverage from administrative data in the SPI and those from household surveys is that the SPI provides potential coverage for social protection needs, where intended beneficiaries are not mutually exclusive groups: The same person can be the intended beneficiary of more than one program. For example, a person might have a disability and live in a poor household, and thus be supported by both a disability program and social assistance for poor households. Therefore, the total number of intended beneficiaries will be higher than the total population. This is not the case for household survey estimates, since coverage is always measured as a percentage of the population or households in the country.

## Comprehensiveness of Social Protection

When computing the overall SPI, different needs are lumped together and weighted by the number of intended beneficiaries. Moreover, across needs, the average expected expenditure is rather different. Looking at the aggregate SPI is difficult, and it is better to assess each need using the same scale and then provide a measure of the comprehensiveness of social protection. Such a measure should better identify the relatively good performance achieved in one need compared to another.

The measure has six dimensions corresponding to the needs, but each need is assessed within the same scale from 0 to 1. Such a transformation requires a value judgment on what constitutes an appropriate average expenditure in each need. Therefore, the maximum amount of 1 or 100% is achieved when there is full potential coverage of the group of interest, and the average expenditure is greater than or equal to a set amount (expressed as a percentage of GDP per capita). The appropriate amount is not the same for all needs. In fact, while the objective of benefits for old age is income replacement, for others—such as children—the objective is more likely to provide a contribution to income sources. The implication is to ensure that, for all dimensions, there should be a theoretical possibility of having a score that reaches 1; hence, the target average expenditure changes in relation to the need under consideration.

The target average expenditure could be empirically driven based on the levels achieved by a group of best-performing countries, considering the replacement rates commonly found in countries in Asia and the Pacific as well as in the Organisation for Economic Co-operation and Development countries, and on the standards set out in the International Labour Organization (ILO) Social Security Convention (Convention No. 102). Based on these sources, an initial assessment suggests that the target average expenditure should be 40% of GDP per capita for old age and disability, and 10% of GDP per capita for children/family, unemployment, and poverty/vulnerability.<sup>13</sup> For health needs, the ratio does not consider a target value for the average expenditure, but only the percentage of the population theoretically protected and entitled to receive a minimum package of health services (this is the percentage of the population with health insurance, or 100% of the population if health is provided through a national health service covering all residents in the country).

Once this transformation is made, the comprehensiveness index is obtained by summing up the scores and dividing by 6.

<sup>13</sup> For example, in the European Union 27, the average expenditure per child was 7.2% of GDP per capita in 2022, ranging from 3.2% in Ireland to 12.0% in Austria. K. Bornukova, M. A. Hernandez, and F. Picos. 2024. [Investing in Children: The Impact of EU Tax and Benefit Systems on Child Poverty and Inequality](#). European Commission and Joint Research Centre (JRC) Publications.

The index can be computed mathematically as follows:

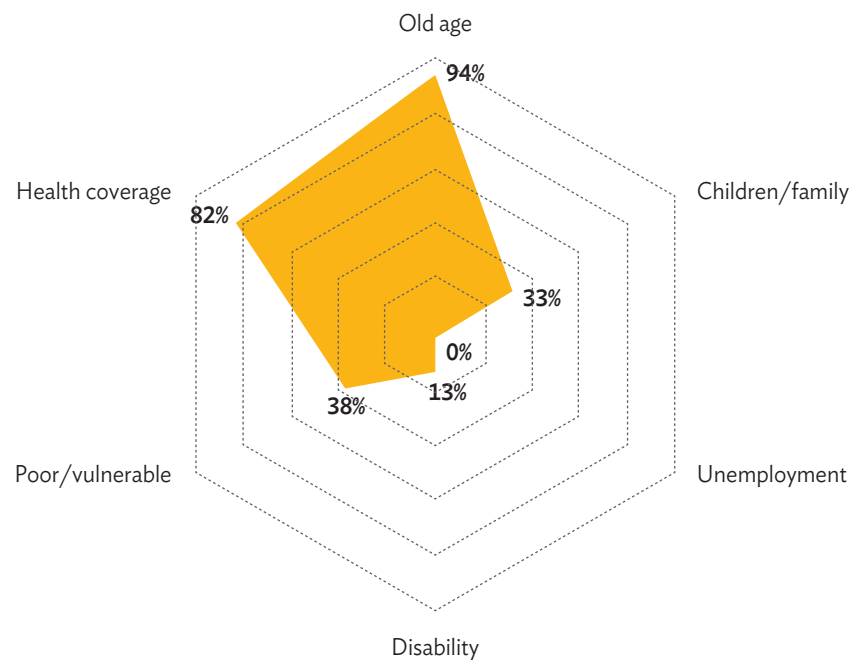
$$Comp_{index} = \frac{(D_1 + D_2 + D_3 + D_4 + D_5 + D_6)}{6}$$

where  $D_i$  is the value of the dimension  $i$ , and the SPI achieved in each dimension is divided by the relative target. For example, if for the first dimension—needs in old age—there is full potential coverage of the population, but only for a value of 20% of GDP per capita, then the value of 0.2 needs to be divided by the target of 0.4, so that  $D_i$  is equal to 0.5.

While for each need the SPI computes the average expenditure per potential beneficiary (expressed as a percentage of GDP), the corresponding dimension of the comprehensiveness index measures the extent to which there is full coverage of the intended population at a desired level. It follows that the dimension of the comprehensiveness index tends to be higher than the SPI element.

A visual and intuitive understanding of the comprehensiveness indicator is provided by the spider web graph (Figure 4). The graph uses fictitious data simply to exemplify the type of information provided. The graph shows which dimension of the social protection system is well developed and where there is a need for improvement. In the example, while old age and health reach high values, unemployment and disability fall behind, revealing a very unbalanced social protection system.

**Figure 4: Hypothetical Example of a Comprehensiveness Index of Social Protection in a Country**



Source: Author.

Achievements toward the needs of poor and disadvantaged groups will inevitably depend on how the country sets the absolute poverty line, so an alternative measure could be the relative poverty line. Moreover, it should be recognized that poverty might be prevented and addressed across other needs, and that in this setup, the poverty/vulnerability need is determined as a residual. Nevertheless, the comprehensiveness analysis provides a first understanding of the social protection system, how it addresses people's needs, and the effects of such a system on poverty will be better analyzed as part of the outcome and impact analysis.

## Disaggregation by Poverty, Sex, and Disability

The classification of programs across functions helps in understanding how social protection responds to broad categories of need. It is also of interest to look at how certain population subgroups are supported across functions.

Social protection expenditure can be disaggregated by poverty, sex, and disability. This calculation requires assessing for each program the percentage of expenditures received by the subpopulation of interest. The overall share of social protection expenditure for the subpopulation of interest can then be compared with the percentage of the population in that subgroup. The ratio of the percentage of social protection expenditure going to group A to the percentage of the population in group A provides a simple “focus indicator.” If the ratio is above 1, it indicates a relatively positive focus on the group of interest; if it is below 1, it indicates a relatively negative focus on the group of interest.

For example, if 30% of expenditure is received by poor people, and 20% of the population is considered poor, this provides a ratio of 1.5, suggesting that social protection expenditure is relatively focused on addressing poverty. This ratio could be further disaggregated by social protection expenditure category. It is important to emphasize that this is a relative focus on current social expenditure in the country, not an assessment of the adequacy of support.

Moreover, to ensure the calculation is meaningful, estimates of the percentage of expenditure going to different subgroups should come either from detailed administrative data or household survey data. When appropriate information is not available, the ratio should not be computed or computed only for programs with reliable information, and reporting which programs have been included in the calculation.

## Theoretical Protection Against Other Risks, Disasters, and Climate Change

The focus of the SPI is on expenditure that responds to actual needs. But when assessing a social protection system, it is also of interest to look at the percentage of the employed population insured against certain risks and whether the population is theoretically protected against covariate shocks.

More specifically, it is useful to consider the percentage of employed people who make social insurance contributions to protect them against individual risks, such as old age (pension), unemployment, sickness, or work accidents and disability. These are simple indicators of the percentage of employed people insured against such risks and provide information on the presence and extent of social insurance mechanisms in the country. While there is a long tradition of such protection in the informal sector, some countries are also developing ways to increase coverage among informal workers; monitoring these developments can be particularly useful.

It is also relevant to investigate the extent to which the social protection system is shock-responsive and has put in place mechanisms to help overcome covariate shocks. Unlike idiosyncratic shocks, covariate shocks tend to affect a large share of the population simultaneously. These shocks can take various forms, such as macroeconomic, conflict-, pandemic-, geophysical-, and climate-related shocks. In particular, climate-related shocks are increasing and will continue to increase because of climate change.

More specifically, it is of interest to determine the extent to which countries are developing shock-responsive and adaptive social protection systems that can complement disaster response mechanisms. Capturing this aspect is important, given ADB's increasing role in addressing the impact of the changing climate.

The presence of a shock-responsive social protection system can be assessed by considering the previous deployment of social protection in response to large shocks (affecting not a single household but a large area or group of households) and the presence of insurance mechanisms that can support people to deal with these types of shocks.

More specifically, the presence of a shock-responsive social protection system should be assessed based on five dimensions or components:

- (i) **Legislation and regulatory framework:** presence in the legislation of the possibility to use a certain social protection program to intervene in case of disasters or shocks;
- (ii) **Financing arrangements:** presence of financing arrangements to be used to support the deployment of emergency social protection responses;
- (iii) **Systems for identifying potential beneficiaries in case of shocks:** presence of social registries, database interoperability that allows identification of groups at risk;
- (iv) **Preparedness to deploy shock-responsive social protection:** elements that could guide the design of interventions and how these should be communicated to the public; and
- (v) **Delivery system:** the extent to which systems can be flexible enough to deliver social protection solutions in case of emergency.

Such assessment does not intend to measure the percentage of the population protected against such risks, but simply whether the country has in place shock-responsive social protection mechanisms judged by an assessment of the five components.

These assessments would be provided as part of the output indicators and the description of the social protection system.

Complementary to this assessment, it is useful to monitor the number of people affected by disasters. Similarly, provided the household survey collects relevant information, it is also possible to assess the extent to which people experiencing this type of covariate shocks have been in receipt of social protection programs.

### 3.3 Outcomes and Impacts

So far, the discussion has focused on inputs (expenditure) and described the outputs of social protection (potential coverage, coverage, average expenditure per recipient, the SPI, comprehensiveness, indicators of relative focus on subpopulation groups), but outcomes must be included to complete the social protection assessment.

From a social protection perspective, what matters are the end results: The objective is for social protection interventions to reduce poverty and vulnerability and improve socioeconomic outcomes so that various risks and their negative consequences are minimized. It is also recognized that social protection is only one of the factors contributing to the outcome indicators and that it is important to have a broader understanding of the macroeconomic environment and possible nationwide external shocks. Nevertheless, the role of social protection is assessed in relative terms, trying to connect achievements in outcome indicators to changes in inputs and outputs.

There are two main types of outcomes: (i) the simulated impact of social protection on poverty and inequality, and (ii) the reduction of the impact of adverse risks.

Estimates of indicators of impact come from the analysis of household surveys, and ultimately, the specific indicators that can be computed depend on the type of information collected.

#### Social Protection Impact on Poverty and Inequality

These measures come from relatively simple partial equilibrium simulations in which current levels of poverty and inequality are compared to a scenario without social protection transfers. This analysis could use the official national poverty line or the relative poverty line. Moreover, the effect of social protection can be considered by looking at different population subgroups: households with at least one person in old age, households with children, households with people with disabilities, low-work-intensity households, poor people, and possibly other subgroups that are policy-relevant, given the country context.

Such an assessment, in conjunction with data on the level of expenditure, can provide insights into the relative effectiveness of social protection and compare results obtained from different countries. Box 3 shows an example of such an analysis and calculation for Mongolia.

#### Reducing the Impact of Adverse Risks

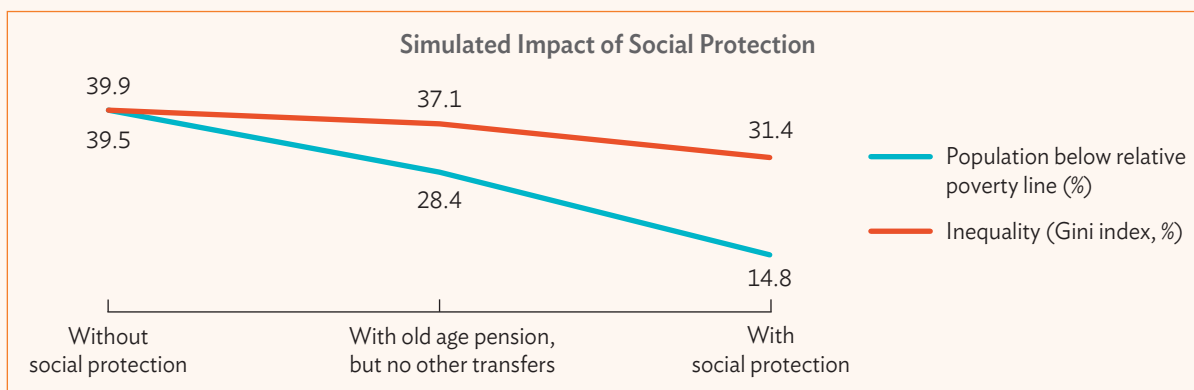
Outcome measures that could monitor the reduced impact of health-related financial risks are the percentage of households with impoverishing health expenditure (percentage of households falling below the poverty line because of health expenditure) or facing catastrophic health expenditure (more than 25% of overall consumption expenditure; SDG indicator 3.8.2) or measures of unmet health needs (percentage of people who forgo health treatment). These measures could also be disaggregated by sex, disability, age, and other relevant groups. Other outcome indicators could relate to food security, and comparing rates of households experiencing hunger by the receipt of relevant social protection programs.

Similarly, it would be possible to analyze the impact of external shocks with and without social protection responses and trends in poverty levels among specific vulnerable groups in relation to social protection interventions.

### Box 3: Example of the Analysis of the Impact of Social Protection on Poverty and Inequality

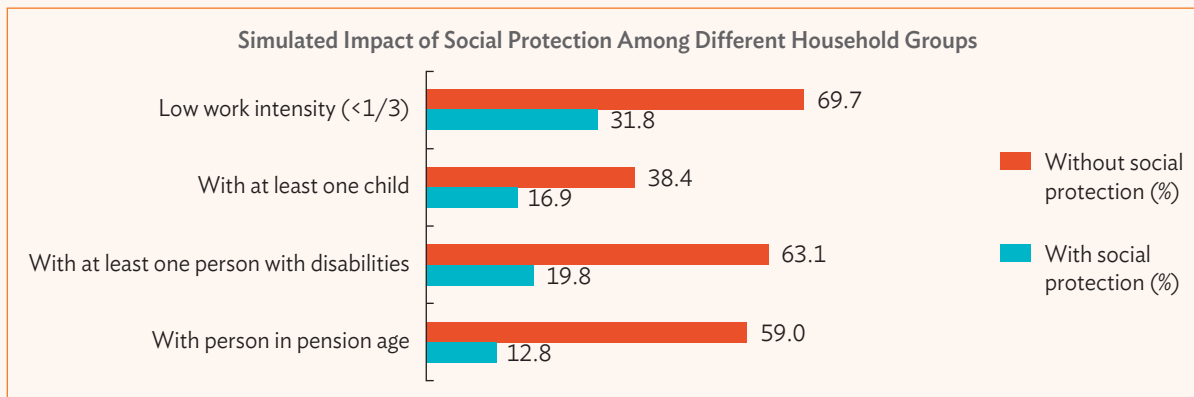
The analysis shows what the poverty and inequality rates would be if all social protection benefits that people received were deducted. This does not account for the household response in the absence of the transfers, but shows to what extent social protection is well targeted to poor people and reduces inequality. Two simulations are conducted, considering the effect of all social protection and only the old-age pension. The rationale for looking at the impact of social insurance pensions is that they can be seen as intertemporal transfers involving the same people, whereas social assistance transfers are more likely to be interhousehold redistribution within the year of analysis.

Using the poverty line of 60% of median income, the percentage of poor people with social protection is 15% (31% with the Gini index, an indicator of inequality), but it would increase to 28% if the only social protection transfers were old-age pensions (37% with the Gini index), and to 40% if pension payments were also withdrawn (40% with the Gini index) (see first figure below).



It is also possible to analyze the impact of social protection transfers on different population subgroups: households with low work intensity, households with at least one child, households with at least one person with disabilities, and households with at least one person in pension age. Note that these are not mutually exclusive groups, but policy-relevant groups to gauge the impact of social protection on certain groups.

The next figure shows poverty levels for these household groups, with and without social protection, considering relative poverty. Poverty in all cases is reduced drastically, but remains very high among low-work-intensity households, more than double the average poverty rate in the country. Without social protection, poverty would be much higher among households with members with disabilities or in pension age.



Source: Author.

The types of outcome indicators that can be analyzed are country-specific and dependent on the information collected in household surveys. Moreover, the relevance of such analysis and the impact of social protection highly depend on the types of social protection programs supporting people in accessing health care and reducing health-related financial risks, or nutrition and food security interventions. While such analysis cannot claim to measure or attribute the impact of social protection on these outcomes, it can show the extent to which beneficiaries of specific social protection interventions display significantly different disadvantages on these measures, even though a proper counterfactual cannot be established.

All outcome estimates require household surveys with relevant information on social protection transfers and consumption expenditure or income, and the possibility to identify relevant vulnerable groups.

While not all countries in Asia and the Pacific conduct regular surveys, a sizable and increasing number do. Where a survey is not available for the latest year for which social protection expenditure is collected, there is always the possibility to compare outcomes for the year in which household survey data are available, provided that such information is not too out of date.

While household survey information for a few countries will not be available or will be too old, in most countries, using available data generates valuable indicators and alternative estimates of coverage and of adequacy.<sup>14</sup>

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<sup>14</sup> For example, an indicator of adequacy that could be computed is the replacement rate for pensions: average pension payments for those aged above pension age (for example, aged 60–69) to average wages for those below pension age (for example, aged 50–59).

# DATA REQUIREMENTS FOR SOCIAL PROTECTION INDICATORS OF COVERAGE AND EFFECTIVENESS



Assessment of social protection systems using the SPICES framework is not technically complex but requires careful collection of policy information and administrative data, as well as analysis of household survey data. Policy information and administrative information are often scattered across government agencies, sometimes published in annual statistical reports, and in other cases remain unpublished in databases or Excel files. Moreover, the inclusion of outcome and impact indicators also requires direct analysis of household survey data.

## 4.1 Policy Information and Documentation

The first step in the process involves identifying and describing relevant social protection programs in the country, resulting in the classification of the main features of each program and the collection of other relevant information about the social protection system in the country. The classification of programs requires a good understanding of the program and its objectives in relation to population needs and their definition.

While most countries maintain a list of past programs, it is always important to critically assess it to verify whether the list is comprehensive and whether any new programs have been introduced or changed.

Social protection programs are found across many government agencies. Rather than focusing on one specific agency and its programs, it is important to consider social protection needs and the most common programs that address them. Therefore, based on knowledge of government structures and their roles, the task is to identify all agencies responsible for providing social protection benefits and services.

It can also be useful to provide a simple diagram showing the government agencies involved in the provision of social protection programs, their mandates, and main programs. For example, while a welfare ministry might be responsible for many social protection programs, active labor market programs are likely to be under a labor ministry. School feeding programs and support for poor households for their children's enrollment might be under a ministry of education; a ministry of health would naturally be responsible for supply-side provisions to public hospitals and clinics, and a health insurance agency would be responsible for collecting premiums and disbursing payments to service providers.

In general, private schemes—those funded by charity or external support—are excluded (unless donor funding occurs as general budget support and/or is channeled through the government system).

Education programs, private personal insurance schemes, and microfinance are all excluded from social protection. Moreover, the focus is on programs that either provide a cash benefit or in-kind support in the form of social care services, in-kind transfers, or subsidies. Tax incentives are excluded unless they result in tangible benefits for people and households. Incentives for employers to hire workers or to promote taking up social benefits are excluded as well.

For all identified national programs, it is necessary to provide a description, capturing information on program objectives, intended beneficiaries, and eligibility rules. The name of the program should be translated into English, but also provided in the original language. This tends to reduce possible confusion when the same program is translated in different ways.

As part of the general description of programs, it is also important to explain the health financing mechanisms operating in the country.

## Classification of the Main Features of the Program

Once the list of programs has been identified, each program needs to be carefully classified based on several criteria: the category, the needs addressed by the program, whether benefits are provided in cash or in kind, whether it is a main or add-on or complementary benefit, whether it is a regular benefit or ad hoc/one-off benefit, and whether the program is poverty-targeted (eligibility is restricted based on direct or indirect measures of the income of potential beneficiaries).

Such classification should be based on the description of each program, but in some cases, it may require obtaining more information from the institution responsible for the program.

All programs and related expenditures should be classified as belonging to one of the following six main needs:

- (i) **Old age:** programs aimed at supporting people after they reach old age and their ability to engage in remunerated work activities declines;
- (ii) **Children/family:** benefits provided in relation to the birth or adoption of children, and for support in the cost of raising children, including maternity and paternity benefits;
- (iii) **Disability:** all disability-specific programs aimed at supporting people with disabilities and addressing disability-related costs;
- (iv) **Unemployment:** all programs aimed at supporting people in unemployment or involuntary time-related underemployment, including temporary benefits for sickness or employment injury;
- (v) **Poverty/vulnerability:** programs targeting the poor and vulnerable groups, including those that do not fall exclusively on one of the groups (i) to (iv); and
- (vi) **Health:** the provision of in-kind health services either through public hospitals and clinics or social health insurance mechanisms, reducing household out-of-pocket expenses.

A list of the most common programs and how they are classified across categories and needs is reported in Table 3, highlighting also common exclusions that are often mistakenly added as social protection programs.

Since classification by need is often the most complex part, this section discusses it in more detail and provides rules to guide such classification.

**Table 3: Social Protection Programs Classification by Category and Need**

| Category          | Need                  | Main Programs                                                                                                                                                                                                                                                          | Exclusions/Comments                                                                                                                   |
|-------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Social insurance  | Old age               | Pension, funeral/death benefits (from insurance system); survival benefits (linked to social insurance contributions) provided to spouses (verifying age of beneficiaries); retirement withdrawals from the National Provident Funds                                   | Excluding withdrawals from the National Provident Funds for educational and medical purposes, house building, or in case of migration |
|                   | Children/family       | Child allowances linked to contributions; benefits to support pregnancy, maternity and paternity, as part of social insurance contributions; survival benefits (linked to social insurance contributions) provided to children                                         |                                                                                                                                       |
|                   | Disability            | Disability pensions (from social insurance), services (for example, rehabilitation) based on social insurance contributions                                                                                                                                            |                                                                                                                                       |
|                   | Unemployment          | Unemployment benefits (from contributory system), redundancy/severance payments, work injury benefits, temporary payments for sickness leave                                                                                                                           | Excluding any in-kind health services, reported under health                                                                          |
| Social assistance | Old age               | Social pensions or old-age allowances/survivorship; noncontributory death/funeral allowances; social services for older people (home care, residential homes); subsidies targeted at older people (transport/utilities discounts)                                      |                                                                                                                                       |
|                   | Children/family       | Child and family allowances, foster care benefits, childbirth or adoption benefits, social services to help children and families, targeted scholarships for children from poor households                                                                             | Excluding universal subsidies for education                                                                                           |
|                   | Disability            | Cash benefits provided to people with disabilities; special services for people with disabilities (residential care, community-based services, personal assistance, caregiver allowances, support for assistive devices, subsidies, and concessions)                   |                                                                                                                                       |
|                   | Unemployment          | Unemployment benefits, public work programs (including food-for-work programs)                                                                                                                                                                                         |                                                                                                                                       |
|                   | Poverty/vulnerability | Cash transfers (conditional or unconditional); food stamps, in-kind support (food and nonfood); health assistance for vulnerable groups (in the form of cash support); housing for the poor or vulnerable groups (subsidized rents, social housing); emergency support | Excluding general support to people to buy homes                                                                                      |

*continued on next page*

Table 3 *continued*

| Category                     | Need         | Main Programs                                                                                                                                           | Exclusions/Comments                                                                                                                                                                                                     |
|------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Active labor market programs | Unemployment | Employment intermediation services, skills training for the unemployed and others, cash for training, job placements, etc.                              | Excluding technical and vocational education, as well as wage subsidies                                                                                                                                                 |
|                              | Disability   | Employment services for people with disabilities                                                                                                        |                                                                                                                                                                                                                         |
| Health                       | Health       | Government health expenditure: outlays from the social health insurance fund, and for the provision of health care through public hospitals and clinics | Health expenditure can be treated all together without the need to disentangle different programs. Cash transfers associated to a disease, but not directly linked to health expenses go under “poverty/vulnerability.” |

Source: Author.

## Old Age

Programs addressing old age include pensions (provided by social insurance or social pensions or old-age allowances), retirement withdrawals from national provident funds, funeral and/or death benefits, subsidies targeted at older people (transport discounts, utilities discounts), and social services for older people (home care, residential homes).

## Children/Family

Under the children/family need, there are child benefits and means-tested child benefits, foster-care benefits, childbirth or adoption benefits, as well as social services to help children and families. Benefits supporting pregnancy, as well as maternity and paternity benefits should also be included here.

Note that if, within child allowances, there are supplements or special programs for children with disabilities, those components need to be assigned under “disability.”

Universal subsidies for education should not be included in social protection. However, if there are means-tested benefits for children attending school, then they are interpreted as transfers that support relatively poor families in the upbringing of children—for example, scholarships for children from poor households, or school feeding in disadvantaged areas of the country.

## Disability

Programs addressing disability needs include disability pensions, special additional cash benefits provided to children with disabilities or older people with disabilities. It should also include special services for people with disabilities: residential care and community-based services; personal assistance and caregiver allowances for people with disabilities; support to acquire assistive devices; and subsidies.

## Unemployment

Under unemployment, active and passive labor market policies should be included. Active labor market policies promote employment; whereas, passive policies replace income in periods of joblessness or job search. Examples include programs helping people to find employment (skills training), employment intermediation services, employment generation through public works, unemployment benefits, and redundancy or severance payments. In this same category, it is necessary to include also temporary payments received for sickness leave and injury benefits. The rationale is that these are like unemployment benefits for people who do not work, so they can be considered “passive” labor market policies. Wage subsidies are excluded because they benefit employers and provide an incentive to hire workers, but do not directly benefit people.

Regarding skills training, it is important to note that these programs should take place after people finish their education. Technical or vocational education is not part of social protection and should not be included here.

## Poverty/Vulnerability

Cash transfers (conditional or unconditional) for poor households and vulnerable groups, food stamps, health assistance for vulnerable groups (in the form of cash support), and housing for poor or vulnerable groups (in terms of support for rents or social housing) are all programs that address poverty and vulnerability. General support for people buying homes should not be included as a social protection program, but only when the specific objective is to support low-income or vulnerable households.

Within this need, benefits are provided to a group of people identified (directly or indirectly) as being poor or vulnerable. It is important to emphasize that in this case, the group of beneficiaries goes across different categories, not exclusively one of the four categories of old age, children/family, disability, or unemployment (for example, it includes both older people, children, and adults). If a program targets exclusively poor children or poor older people, it should be included under “children/family” or “old age.”

Disadvantaged or marginalized groups can include a diversity of situations: ethnic minorities, migrants, war veterans, and other groups. These groups are highly dependent on the specific context of each country.

## Health

Health can be treated as a single program, and government expenditure presented as a whole. Alternatively, it is possible to distinguish between the financing mechanisms: social health insurance and intergovernmental transfers. Regardless of the financing modality, all government health-care expenditure for the provision of inpatient and outpatient health care, and medicines and pharmaceutical products should be included. When the services are provided through public clinics and hospitals, the cost of supplying these services should also be included.

Ideally, when information is available from government health accounts, it would be better to exclude costs for services that are purely collective—such as research and development—and not for the provision of individual services. For example, while the salaries of government nurses and doctors should be included, those of collective administration under the Ministry of Health should be excluded. Similarly, while preventive services such as immunizations should be included, public campaigns to inform about potential health risks should be excluded, as should any government-sponsored medical research that does not provide a direct benefit to people.

If a country prepares health expenditure following the United Nations standards for classification of expenditure by function, all government expenditure on medical products, appliances and equipment, outpatient services, hospital services, and public health services can be included. In practice, given that elements of government health expenditure that should be excluded form a small percentage of the overall expenditure, when it is difficult to identify such elements, all government health expenditure can be included here.

## Other Considerations

The classification of expenditure should always consider the objective of the program and not be driven by the institution managing the program. This applies specifically to social insurance programs where a pension fund may provide different benefits to older people, children, and people with disabilities. This is also true for national provident funds.

In some cases, programs might have multiple objectives, and it is necessary to carefully assess how to assign such expenditures. Three options are possible:

- (i) Split expenditure so that it can be assigned to different functions,
- (ii) Assign the expenditure to the main function in terms of expenditure share, and
- (iii) Determine the prevailing function when the beneficiary belongs to more than one group.

When there is the required information, it is recommended to split the program expenditure considering the shares attributed to different functions. For example, survivors' pensions could go both to spouses and children. Expenditure could be assigned to "old age" and "children" based on the respective share of expenditure.

If information about the shares of expenditure is unknown, and especially if the level of expenditure is relatively small, expenditure could be assigned to the main function. For example, if most survivor pension payments go to "old age," then the whole expenditure can be assigned to that need.

In other cases, the beneficiaries of the program belong to different groups. For example, children receiving a child benefit when they are poor, or older people with a disability receiving an old age pension, or skills programs specifically targeted to people with disabilities. In all such cases, it might be complicated to determine to which function to assign the expenditure, and the decision should be made considering the following order: health care, old age, disability, unemployment, children/family, poverty/vulnerability. This means that, when there is uncertainty, the first in this group should determine the prevailing function.

For example, if there is a skills program for people with disabilities, both the "unemployment" and "disability" functions could be considered, but based on the order of assignment, the program expenditure should be assigned to "disability," since this comes before "unemployment." If only poor children receive child allowances, the program could be assigned either to the "poverty/vulnerability" need or the "children/family" need. Since children are given first priority, it is assigned to "children/family."

However, it is always important to assess the program's objective. If an older person with disabilities receives pension payments, these should be paid for old age as the primary reason for the transfer, rather than the disability. However, if an older person with disabilities receives a pension supplement or special concessions because they encounter high disability-related costs, then such expenditure should be assigned under "disability."

Special consideration should be given to programs that are often a shared responsibility between ministries. For example, the ministries of health and social welfare might both support vulnerable groups in relation to their specific health needs. Whenever the support provided by the ministry of social welfare is not directly linked to health treatment, it can be assigned to poor/vulnerable groups or the specific group receiving the service. For example, in some countries, there could be a scheme providing a cash transfer to people with cancer. This is supposed to support such people to deal with the costs related to cancer treatments, but the benefit is not a specific reimbursement for such costs, and the benefit is provided regardless of the actual costs incurred to receive cancer treatments. However, if the payment is a reimbursement for the cost incurred in obtaining health care, it should be assigned to “health.”

Attention should also be given to cases where the program contains objectives and functions that are beyond those of social protection. In such cases, expenditure that is not part of social protection should be excluded.

Particular care should be given to national provident funds, which sometimes allow withdrawals for expenses that fall beyond the social protection scope. For example, early withdrawals could be used for educational and medical purposes, house building, or migration. All such uses of withdrawal funds fall outside the scope of social protection and should be excluded. This also signals the importance of disaggregating withdrawals from national provident funds, where some expenditure might be assigned to “disability” and others to “unemployment.”

## Other Dimensions of the Social Protection System

Two other dimensions should be analyzed as characterizing the social protection system of the country: (i) the number of employed people making social insurance contributions toward old age, employment, injury and/or disability, sickness, and unemployment; and (ii) the description of the ability of social protection to respond to shocks.

### Social Insurance Contributors

Provided the country under analysis has a social insurance system, the agency responsible for social insurance should provide information on the number of people who made social insurance contributions against various risks. Such information is usually found in the annual report of the agency and captures the extent to which the country is using social insurance to protect the population against certain risks before they materialize. Most commonly, people can be considered protected if they are making social insurance contributions through a collective scheme (compulsory or voluntary).

The percentage of protected people against different types of risk is computed as a percentage of the employed population.

If the country has a social health insurance mechanism, it is useful to identify the number of people who are either making social health insurance contributions (compulsory or voluntary) or whose premiums are paid by intergovernmental transfers. Health protection will then be computed as the percentage of the population with social health insurance.

For countries without social health insurance but with a national health service, the percentage of the theoretically protected population would be considered equal to 100%. However, output and outcome indicators will verify the extent to which this translates into actual health protection based on the level of out-of-pocket and impoverishing health expenditure.

## Shock-Responsive Social Protection

Information on the ability of the social protection system to respond to covariate shocks will be assessed, seeking answers and assessing five components of a shock-responsive social protection system.

- (i) **Legislative and regulatory framework:** Does the legislation (laws and regulations) provide the possibility to use some of the social protection programs in a flexible way and respond to shocks?
- (ii) **Financing arrangements:** Are there financing arrangements in place that can support the deployment of emergency social protection responses and the use of reserve and contingency funds?
- (iii) **Identification of potential beneficiaries:** Are there systems and databases that could be used to quickly identify potential beneficiaries in the event of a shock?
- (iv) **Preparedness to deploy shock-responsive social protection measures:** Are there documents and plans that set out rules to determine the key parameters (who to cover, length of support, and amount of support) of social protection responses in a short period?
- (v) **Delivery of social protection responses:** Are there advanced payment systems in place that can support the rapid delivery of support?

One way to approach these questions is to consider whether the country has, in the past, adapted and used social protection mechanisms to respond to shocks, and in particular, what was done in response to the COVID-19 pandemic or other shocks that hit the country.

## 4.2 Collection and Analysis of Administrative Data

The collection and analysis of administrative data involve three tasks: (i) the collection of reference data and background statistics, (ii) the gathering of information about expenditure and the number of beneficiaries of each program, and (iii) the production of an initial set of input and output indicators.

An Excel template has been designed to accompany the SPICES methodology and support the entry of basic statistics and information on programs, their classification, number of recipients, and expenditure. Such an Excel file provides structure for the exercise and automatically uses the information entered to compute key indicators. However, it is important for the analyst to check the results and intermediate calculations to identify potential inconsistencies due to data entry errors and incorrect classification. Collecting information on expenditures and beneficiaries for each program remains the most time-demanding task.

### Basic Statistics

Basic statistics comprise information on the GDP, government expenditure, population, and the size of selected population subgroups. These statistics are used to calculate input and output SPIs, mainly providing denominators for the intended beneficiaries and to standardize the SPI indicator.

They also contain other indicators that provide some basic background on the country, such as life expectancy, percentage of urban population, average household size, average annual GDP growth in the last 5 years, employment-to-population ratio, the Gini index of inequality, and the average exchange rate to the United States dollar during the year.

However, the focus is on the statistics used to calculate the SPIs, and for these, it is important to clarify the expected primary and alternative sources of information as well as the specific definitions for each variable. Alternative sources should be used to validate the data and ensure that there are no substantial differences. This information is summarized in Table 4 and discussed in some detail in this section. In general, the main source of information should be national agencies, which should also be employed if there are discrepancies with international statistics, though discrepancies could be highlighted.

**Table 4: Basic Statistics for Computing Social Protection Indicators**

| Statistics                                             | Preferred Data Source                                           | Alternative                                        |
|--------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------|
| GDP (current prices, LCU)                              | National accounts                                               | ADB Key Indicators or World Development Indicators |
| GDP per capita (current prices, LCU)                   | National accounts                                               |                                                    |
| GNI (current prices, LCU)                              | National accounts                                               |                                                    |
| Government expenditure (current prices, LCU)           | National statistics                                             | ADB Key Indicators                                 |
| Total population (midyear resident)                    | Ratio of GDP and GDP per capita                                 | Population projections                             |
| Female population                                      | Census or population projections                                |                                                    |
| Older people population (age $\geq$ pension age)       | Census or population projections                                |                                                    |
| Children population (age <15, but with exceptions)     | Census or population projections                                |                                                    |
| People with disabilities                               | Household survey                                                | Administrative data, regional estimates            |
| Employed, unemployed, and time-related underemployed   | Labor force survey                                              | ILO-modeled projections                            |
| Population living below national poverty line          | National country report, updated using elasticity to GDP growth |                                                    |
| National poverty line (annual)                         | National country report, updated by CPI                         |                                                    |
| Disaster-affected population                           | National statistics                                             | SDG UN Database                                    |
| <b>Other background statistics</b>                     |                                                                 |                                                    |
| Life expectancy                                        | National statistics                                             | World Development Indicators                       |
| Urban population                                       | National statistics                                             | World Development Indicators                       |
| Average real GDP per capita growth in the last 5 years | National statistics                                             | World Development Indicators                       |

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Table 4 *continued*

| Statistics                                  | Preferred Data Source              | Alternative                  |
|---------------------------------------------|------------------------------------|------------------------------|
| Employment to population ratio, 15+         | Labor force survey                 | ILO-modeled projections      |
| Gini index of inequality (per capita)       | National country report            | World Development Indicators |
| Average household size                      | Recent survey or population census |                              |
| Exchange rate, LCU to USD (average in year) | National or central bank           | World Development Indicators |

ADB = Asian Development Bank, CPI = consumer price index, GDP = gross domestic product, GNI = gross national income, ILO = International Labour Organization, LCU = local currency unit, SDG = Sustainable Development Goal, UN = United Nations, USD = United States dollar.

Source: Author.

## Gross Domestic Product and Gross National Income Figures

The GDP and the gross national income (GNI) figures, as well as GDP per capita measures, should be taken from national accounts statistics, which are usually published by the national statistics office of the relevant country. The statistic of interest is recorded in local currency units and at current prices. It is useful to note that GDP per capita is calculated by dividing total GDP by the population of the country, and particularly the midyear resident population. Therefore, the population is obtained by dividing the GDP by GDP per capita. Such a figure should be compared with the total resident population in midyear as reported by the demographic statistics office. The two numbers should match; if there are any inconsistencies, the number obtained from the ratio of GDP-to-GDP per capita should be retained.

Alternative sources for GDP and GNI figures are the ADB Key Indicators and the World Development Indicators. The GNI is collected to verify whether there are significant variations in the GDP. These are driven by net transfers from nonresidents (people and firms). If large differences are found, it might be more appropriate to use GNI per capita rather than GDP per capita for all the SPI calculations.

## Government Expenditure

Government expenditure should be reported at current prices and local currency units, and is available from the national statistics office, either on its website or in national statistics yearbooks. This information can also be retrieved from the ADB Key Indicators (expenditure by function, general government – total expenditure) to verify whether there are significant discrepancies.

## Population

The population of interest is the average population living in the country in the year of reference. This is taken to be the midyear resident population. This can be obtained by dividing the GDP by the GDP per capita. However, the number can also be validated by looking for the midyear resident population in the demographic statistics.

The remaining statistics concern the sizes of population subgroups. These can be derived as population percentages (since some are measured through household surveys) and then multiplied by the total midyear population to compute absolute numbers.

The reason for using population percentages is that information on population subgroups might come from different sources of population size, for example, the population at the end of the year or the census population from a different year. This is why such data is used to compute percentages, which are then multiplied by the total midyear population.

## Older People

The older people's population is defined by the official pension age in the country. For example, it could be 65 and over, 60 and over, or differentiated by age between men (65) and women (60). The population share of this group must be computed with relevant available statistics as close as possible to the year of computation, using demographic statistics and population projections, or the population census if held in recent years.

## Children

For the children's population, the standard reference group is the 0–14 age group. However, this group could consider a higher age if the official school-leaving age is higher than 14 and if one of the social protection programs in the country is provided to all children under a higher age. However, the maximum age considered should not exceed 18. Again, the task here is to compute the percentage of the population in this age group before deriving the absolute number by multiplying the percentage by the midyear population.

## People with Disabilities

Information on estimates of disability prevalence/number of people with disabilities could come from different sources: (i) administrative data can provide the number of people officially registered as people with disabilities, (ii) censuses or household surveys could provide estimates of disability prevalence (increasingly using the Washington Group questions on functional difficulties), and (iii) there are regional indirect estimates reported in the World Disability Report.

It is important to note that estimates on disability prevalence can vary substantially from one source to another, often because the underlying concept of disability is different. In many countries, administrative numbers of people officially registered as people with disabilities tend to underestimate the actual number and may coincide with the number receiving disability benefits. Nevertheless, such prevalence rates can be compared to regional estimates of people with severe disabilities.

The other potential source of data comes from censuses and household surveys. Questions often focus on impairment or are direct questions on whether people have a disability. Again, this tends to underestimate the actual number of people with disabilities. Nevertheless, increasingly, surveys are adopting questions on functional difficulties across a range of domains (walking, seeing, hearing, communicating, self-care, and remembering/concentrating) or a simplified question on "long-standing limitations in activities due to a health problem." Focusing on functional difficulties helps to remove stigma from a direct question using the word "disability" and usually provides higher and more accurate estimates of disability prevalence.

Nevertheless, such estimates need to be scrutinized to check the age group they cover and the threshold or cutoff used to determine disability prevalence. Often, questions on functional difficulties are only asked of people aged 15 and above, and so might ignore the prevalence in children. Moreover, it is recognized that disability is not a dichotomous phenomenon, but rather difficulties are present on a continuum ranging from *very mild* to *very severe*. Questions on functional difficulties usually grade difficulty as *some difficulty*, *a lot of difficulty*, or *cannot do at all*. The internationally accepted cutoff for disability is to have at least *a lot of difficulty* in one domain. However, some countries do adopt such thresholds, for example, defining disability when people report having any difficulty, but at least in two domains.

Some countries also conduct model disability surveys that usually provide very high estimates of disability prevalence. Care should be taken whenever these estimates are very high, since the focus on disability is on cases where some level of support is needed. In other words, focus should be on severe cases of disability.

The World Disability Report also provides regional estimates of expected disability prevalence, both for *severe* and *moderate/severe* disability. The ILO uses such estimates for severe disability to determine the number of people with disabilities. These could be taken as benchmarks to compare with national estimates and to correct estimates if they are only available for people aged 15 and above. The preference would be to use estimates from household surveys using questions on functional difficulties, and then on prevalence based on the numbers available in official registries. However, in both cases, it is useful to compare these estimates with those reported in Table 5.

Finally, when constructing and comparing SPICES over time, it is crucial to provide consistent estimates of the prevalence of disability, ensuring that the same definition is used.

**Table 5: Prevalence of Moderate/Severe Disability, Regional Estimates**  
(%)

| Indicator         | Region (World Health Organization) |                |        |                       | High-Income Countries |
|-------------------|------------------------------------|----------------|--------|-----------------------|-----------------------|
|                   | Western Pacific                    | Southeast Asia | Europe | Eastern Mediterranean |                       |
| Severe disability |                                    |                |        |                       |                       |
| Males             |                                    |                |        |                       |                       |
| 0–14              | 0.5                                | 0.7            | 0.9    | 0.9                   | 0.4                   |
| 15–59             | 2.4                                | 2.7            | 2.8    | 2.9                   | 2.2                   |
| 60+               | 9.8                                | 11.9           | 7.3    | 11.8                  | 7.9                   |
| Females           |                                    |                |        |                       |                       |
| 0–14              | 0.5                                | 0.7            | 0.8    | 0.8                   | 0.4                   |
| 15–59             | 2.4                                | 3.1            | 2.7    | 3.0                   | 2.5                   |
| 60+               | 10.3                               | 13.2           | 7.2    | 13.0                  | 9.0                   |

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Table 5 *continued*

| Indicator                  | Region (World Health Organization) |                |        |                       | High-Income Countries |
|----------------------------|------------------------------------|----------------|--------|-----------------------|-----------------------|
|                            | Western Pacific                    | Southeast Asia | Europe | Eastern Mediterranean |                       |
| Moderate/severe disability |                                    |                |        |                       |                       |
| Males                      |                                    |                |        |                       |                       |
| 0–14                       | 5.4                                | 5.3            | 4.4    | 5.3                   | 2.9                   |
| 15–59                      | 14.0                               | 14.8           | 14.9   | 13.7                  | 12.3                  |
| 60+                        | 46.4                               | 57.5           | 41.9   | 53.1                  | 36.1                  |
| Females                    |                                    |                |        |                       |                       |
| 0–14                       | 5.2                                | 5.2            | 4.0    | 5.2                   | 2.8                   |
| 15–59                      | 13.3                               | 18.0           | 13.7   | 17.3                  | 12.6                  |
| 60+                        | 47.0                               | 60.1           | 41.1   | 54.4                  | 37.4                  |

Notes: Effective 1 February 2021, ADB placed a temporary hold on sovereign project disbursements and new contracts in Myanmar. ADB placed its regular assistance to Afghanistan on hold, effective 15 August 2021.

Countries in Asia and the Pacific fall into the World Health Organization regions as follows:

1. Western Pacific: Cambodia, the People's Republic of China, the Cook Islands, Fiji, Kiribati, the Lao People's Democratic Republic, Malaysia, the Marshall Islands, the Federated States of Micronesia, Mongolia, Nauru, Niue, Palau, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Viet Nam.
2. Southeast Asia: Bangladesh, Bhutan, the Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste.
3. Europe: Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
4. Eastern Mediterranean: Afghanistan and Pakistan.
5. High-Income Countries: Brunei Darussalam, Japan, the Republic of Korea, and Singapore.

Source: World Health Organization and World Bank. 2011. [World Report on Disability](#). Table 2.2.

## Employed, Unemployed, and Underemployed

Estimates of the prevalence of these groups usually come from labor force surveys, generally published by the national statistics office in annual statistics yearbooks or on its website. If these are not available for the year of interest, it is possible to use the simulated percentage provided by the ILO. As much as possible, estimates of employment, unemployment, and underemployment should follow the latest recommendations of the International Conference of Labour Statisticians.

It is important to reiterate that the measure of time-related underemployment has changed compared to the past, since, similar to unemployment, it is necessary both to working part-time, wanting to work more, and looking for work (based on resolutions of the 19th International Conference of Labour Statisticians). It should be specifically noted that, unlike in previous SPI computations, unpaid family workers and seasonal workers are included only if their work hours fall below a certain threshold and they want and are looking for other work.

The intended population for the unemployment need is the sum of the unemployed and the time-related underemployed (referred to as LU2 by the [ILO](#)).

When unemployment and underemployment are provided as percentages in official statistics, they are usually expressed as a percentage of the labor force; therefore, to obtain the absolute numbers, they must be multiplied by the labor force and not by the population.

## Population Living Below the Poverty Line

The percentage of the population living below the poverty line should come from the most recent household survey conducted in the country. The best source of information for this statistic is the national statistics office and relevant poverty survey reports. It is important to emphasize that the interest is in the nationally defined poverty line, not the international poverty lines.

If the survey was conducted before the year of interest, some adjustments need to be made. Based on a database of comparable growth spells in developing countries from the 1980s to 2021, an estimate of the elasticity between real GDP growth per capita and poverty across developing countries is 2.5%, which means that an increase of 1.0% on real GDP per capita translates into a 2.5% decline in the poverty rate (for example, if the poverty rate was 20.0% and there was a real GDP per capita increase of 2.0%, the poverty rate is expected to decline by 5.0%—meaning that the new poverty rate would be 19.0%).<sup>15</sup> Unless there is a specific growth–poverty elasticity for the country under analysis, this average elasticity can be used to update the percentage of the poor population in the country.

It is also useful to report the value of the national poverty line on an annual basis (when the national poverty line is reported in monthly terms, this should be transformed into annual values by multiplying by 12), so that the value of the poverty line can be compared to the GDP per capita. If the poverty line comes from previous years, it is necessary to update it to the year of reference by inflation. The ratio of the consumer price index in the year of reference and the year of the measurement of the poverty line must be multiplied by the poverty line.

## Disaster-Affected Population

This is an SDG indicator (SDG 1.5.1) computed as the sum of people who died, went missing, or were directly affected by disasters (suffered injury, illness, or other health effects; evacuated; were displaced; or suffered other direct economic damage). The number is expressed for every 100,000 people.

The indicator can be obtained either from the national statistics office or the SDG indicators database maintained by the [United Nations Statistics Department](#). The number needs to be expressed as an absolute population number (multiplied by the population in midyear and divided by 100,000).

## Other Background Statistics

Other indicators can usually be found in the statistics yearbook produced by the national statistics office. Alternatively, they are also available in international databases, such as the [World Development Indicators](#).

The average annual GDP per capita growth in real terms is computed using a time series of GDP per capita in constant prices and dividing GDP per capita in the reference year by the GDP per capita 5 years before, divided by 5.

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<sup>15</sup> H. Wu et al. 2024. [The Growth Elasticity of Poverty: Is Africa Any Different?](#) Policy Research Working Paper. No. 10690. World Bank.

If not available in the statistics yearbook, information about the Gini index of inequality is usually found in the poverty report.

The average exchange rate for the year of observation can be provided by the central bank of the country. It can also be downloaded easily from the World Development Indicators. If computed from monthly averages, annual averages must be weighted to consider different days of the month (for example, 31 January, 28 February).

## Expenditure and Number of Beneficiaries

The key table that must be populated in the Excel file contains expenditure and the number of beneficiaries for each program. Such data should be collected for the most recent 3 years for which data is available. Moreover, an effort should be made to collect information for the last year for which data are available, and for the year for which the latest poverty estimate was made, provided this was within the last 5 years (based on household survey data).

The collection of expenditure data and the number of beneficiaries are likely to be the most time-consuming exercises. In this regard, a judgment should be made on the value of spending a lot of time obtaining data for very small programs. In such cases, since these programs will have a very marginal impact on the overall indicators, it is sufficient to obtain approximate numbers or simply ignore the program.

Moreover, when collecting this information, it is important to determine whether the data also provide information on the number of beneficiaries or expenditure disaggregated by sex, poverty, and disability. When available, such information should be provided in a separate column.

Information on expenditure and the number of beneficiaries should not cause significant technical difficulties; however, in some cases, it is important to be careful about how numbers are provided and added.

It is also important to provide the specific source of the data used for the reported numbers (for example, the name of the report and page where relevant figures are found, the website and date at which data were retrieved, or an Excel file or document provided by a certain agency).

In determining social protection expenditure, the interest is in the value of cash or in-kind benefits provided to beneficiaries. This means that whenever possible, expenditure should exclude purely administrative expenses and focus on the end benefit for recipients. In the case of cash transfers, this is relatively easy, but it can be a bit more complex when dealing with in-kind services, especially when provided by government institutions, depending on how budget expenditures for the different programs are reported. It should also be pointed out that, for in-kind services (unlike cash transfers), the salary of social workers and social assistants is a crucial part of the in-kind benefit and therefore should not be considered simply as “administrative expenditure.”

## Beneficiary Households Versus Beneficiary People

For some programs, especially poverty-targeted programs, the intended beneficiary is not the person but the household (in some cases, the amount of the benefit may also change depending on the household size). In such cases, statistics might simply report the number of beneficiary households (or the number of payments). However, that is not the number of beneficiaries that should be reported. Instead, all household

members in beneficiary households should be included. Such information could be provided in the agency report, but if not, it can be calculated by multiplying the number of households by the average household size of the beneficiaries.

### **Annual Figures from Monthly Data**

In some cases, data from administrative sources is available monthly, and while expenditure is simply the sum of monthly expenditures, attention should be given to how the number of beneficiaries is computed. This should not be the sum of the monthly beneficiaries, nor the number of beneficiaries in the first or last month of the year, but the average number of beneficiaries calculated from all months of the year.

### **Expenditure and Number of Beneficiaries in Health Programs**

In many countries, when health services are provided to the population through government hospitals and clinics with little household out-of-pocket expenditure at the point of service delivery, it is difficult to count and identify the beneficiaries. However, health management information systems are improving, and countries might progressively have more information on services provided at the individual level.

Wherever possible, this information could be captured in a similar manner to other programs, but if it is not available, it can be omitted. Moreover, in most cases, health expenditure will not be disaggregated by program but will be treated at an aggregate level.

### **Percentage of Expenditure Received by Poor People, Women, and People with Disabilities**

In some cases, administrative data might contain information on the expenditure going to some population subgroups or the number of beneficiaries within a certain program who are poor, women, or people with disabilities. Only information for which data exists should be reported. If administrative data do not provide such information, the respective columns should be left blank, and later they might be filled in by estimates coming from household survey data.

## **Calculation of Key Indicators**

Based on the information entered, the Excel file developed by the SPICES team will automatically compute a set of indicators that can be seen as the product of the exercise. These values need to be scrutinized to identify any unexpected or contradictory results that may reveal input mistakes.

Indicators that will be automatically computed include input indicators: social protection expenditure and health expenditure as a percentage of GDP; government expenditure; and the structure of social protection expenditure in terms of share of social insurance, social assistance, and active labor market programs. Moreover, the program will identify the five most important programs by expenditure. The SPI will also be automatically computed, providing disaggregation across needs, potential coverage, and average expenditure as a percentage of GDP per capita. The calculation will be conducted with and without health expenditure. Potential coverage of the employed population against old age, disability, unemployment, sickness, and injury will also be provided, together with information on the potential population coverage against health risks. The coverage against health risks, together with SPI information, will produce the comprehensiveness indicator and the spider web.

## 4.3 The Analysis of Household Survey Data to Compute Outcome and Impact Indicators

The analysis of household survey data necessary to compute outcome and impact indicators requires a different set of skills, familiarity with the statistical analysis of microdata, and knowledge of relevant statistical software.

The specific household survey type of interest for this analysis is the survey used to produce national monetary poverty estimates. Such surveys collect information about household incomes and consumption expenditure. Most commonly, these are referred to as “household income and expenditure surveys” or “household budget surveys,” but in some countries they might be named differently. For example, the Living Standards Household Surveys supported by the World Bank also provide the relevant information to conduct the analysis.

There are four sequential steps in the analysis of household survey data: (i) questionnaire analysis, (ii) requesting or obtaining microdata, (iii) testing the validity and representativeness of the data for the social protection assessment, and (iv) estimating relevant indicators.

### Questionnaire Analysis

The first step involves assessing the type of information collected in the questionnaire. Therefore, it is important to obtain the questionnaire used for the survey. This is usually available on the website of the national statistics office or the agency involved in collecting the survey. It can also be found as an annex of the main survey report or in data survey repositories such as the [International Household Survey Network](#), the [Pacific Data Hub](#), or the [Pacific Microdata Library](#). Such repositories also provide a reference to publications and data access. However, they are not always up to date, so the national statistics office should also be consulted.

There are mandatory variables that are the minimum required to conduct the analysis, other supplementary information that could enrich the analysis, and the types of outcome indicators that can be measured.

As a survey designed to measure monetary poverty, it is assumed that the survey will collect information on consumption expenditure and/or income. However, it is particularly important to assess the extent to which the questionnaire collects detailed information on at least some of the main social protection cash transfers and services. This is the mandatory information to include in the survey to conduct the social protection assessment. Importantly, such information could be collected either by identifying the beneficiary of each transfer or social protection program and the amount received, or by determining whether the household received the transfer and its value. If information is provided at the individual level, then beneficiaries and amounts of social transfers can be disaggregated by age and sex of beneficiaries and other people’s attributes (disability, ethnicity).

It should be checked whether the survey contains the following information, determining the scope and extent of analysis:

- (i) Questions enabling the identification of people with disabilities and other recognized vulnerable groups in the country (for example, ethnic minorities);
- (ii) Household member employment status;

- (iii) Nutrition measures and food security;
- (iv) Enrollment and attendance at preschool or school among children of the relevant age group;
- (v) Access and use of health services, as well as information on health expenditure;
- (vi) Whether people with certain health needs forgo treatment;
- (vii) Household experience with different types of shocks and coping mechanisms; and
- (viii) Other relevant indicators of social participation.

Table 6 summarizes the available information from a household survey, which will shape the type of analysis to be done.

**Table 6: Summary of Information Available from a Household Survey**

| Information Type                                                                 | Mandatory | Useful |
|----------------------------------------------------------------------------------|-----------|--------|
| Household income                                                                 | X         |        |
| Household consumption expenditure                                                | X         |        |
| Receipt of social protection programs at the household level                     | X         |        |
| Receipt of social protection programs at the individual level                    |           | X      |
| People with disability (either through functional difficulties or other proxies) |           | X      |
| Other vulnerable groups (for example, ethnic minorities)                         |           | X      |
| Employment status of household members                                           |           | X      |
| Nutrition measures and food security                                             |           | X      |
| School enrollment/attendance of children in school age                           |           | X      |
| Access and use of health practices of household members                          |           | X      |
| Health expenditure                                                               |           | X      |
| Forgone health treatment                                                         |           | X      |
| Shocks and coping mechanisms                                                     |           | X      |
| Other indicators of social participation                                         |           | X      |

Source: Author.

## Requesting Microdata

Once established that the survey contains at least the mandatory information, the following step involves requesting the microdata: the unit-level files at the household and individual levels. The request should also specify the need to obtain the aggregated variables for the estimation of poverty—that is, the poverty line; the income and/or the consumption expenditure aggregate; any variable to adjust for intrasurvey price differences and the variables containing the main income components (income from paid employment, income from self-employment, property income, government transfers, remittances); and consumption subaggregates (food, clothes, transport, education, health).

## Validity for Social Protection Assessment

Before conducting the actual estimates assessing the social protection system, it is important to check that the data and sampling weights correctly reproduce the estimates published in the official survey reports. This can be done using estimates of people falling below the poverty line or other key indicators (for example, mean income or consumption, average household size).

It is also important to check the absolute population estimate obtained using the sampling weights, as well as the percentage of people over pension age and children. This enables the researcher to better interpret the results of the estimated figures for beneficiaries and expenditure for social protection programs.

If sampling weights have been calibrated, absolute population figures and population shares should match those expected and included in the basic statistics. However, this is not always the case. In general, using survey data, it is preferable to focus on percentage estimates, rather than absolute figures.

A final check consists of reproducing the survey estimates of the number of beneficiaries and expenditure for all the social protection programs for which the survey collects information. When comparing administrative and survey numbers, surveyors should remember that the surveys produce estimates that should always be read with a confidence interval, or an interval of possible values. It is useful to analyze the ratio of actual versus estimated numbers for recipients and expenditures to determine whether the estimates fall within an acceptable margin ( $\pm 20\%$ ).

It is not unusual to find that surveys underestimate the number of beneficiaries and expenditure, and if that is the case, the consequent impact of social protection on poverty reduction will be affected. In such cases, the first step is to understand the possible reasons for the underestimation: The survey question might not have been very clear, or the program might not have been distributed uniformly across the sampling domains. In some cases, there may be a good argument for imputing the missing beneficiaries.

It is crucial to highlight such discrepancies to provide a more nuanced interpretation of the subsequent findings. A template program (a STATA do-file) is available to guide the researcher in the steps required. Moreover, some of these tasks can also be performed using the [ADePT](#) software platform developed by the World Bank (free software for automated analysis of household survey data).

## Estimating Indicators

The estimation of relevant indicators has five separate steps: (i) the initial preparatory analysis; (ii) survey estimates on coverage of social protection programs, and if applicable, coverage of health insurance and adequacy indicators; (iii) simulation of the impact of social protection on poverty and inequality; (iv) evidence of the impact of certain risks (for example, level of food insecurity, lower impoverishing health expenditure and catastrophic health expenditure); and (v) evidence of gaps on participation between vulnerable groups and the rest of the population. When previous estimates on the impact of risks and gaps are available, trends can also be analyzed.

### Preparatory Analysis

The initial preparation identifies and gathers in the same file the relevant information on the receipt and value of social protection transfers, the receipt of social services, and health-care services.

Moreover, households and people are grouped by characteristics: people over pension age, children, people with disabilities, people from ethnic minorities, and people of working age who are out of employment in households with low work intensity.

In this phase, beyond the official poverty line, it is also useful to compute a relative poverty line, defined as 60% of the median income or consumption expenditure.

For this task, there is also a template program (a STATA do-file) that supports this initial analysis and provides the input file for calculations that can be performed using ADePT.

## Coverage Estimates and Expenditure Received by Different Groups

Provided that the survey collected information on social protection programs at the individual level, coverage estimates in sample surveys allow for verifying the percentage of people with different characteristics receiving either a specific social protection program or any social protection program. This differs from administrative estimates, where the information on the numerator and denominator comes from different sources.

If the survey collects information on receipt of social protection programs only at the household level, then coverage can be computed at the household level: among households with at least one person in pension age, or households with at least one child.

Furthermore, where information is collected and relevant, it is possible to measure population coverage of health insurance, or the percentage of the employed population making social insurance contributions.

These estimates complement those obtained from the analysis of administrative data.

Furthermore, when information on the receipt and/or value of social protection transfers is available at the individual level, it is possible to estimate for each program the percentage of overall expenditure going to different population subgroups of interest, such as women, people with disabilities, and poor people. Such information can be used to disaggregate social protection expenditure by sex, disability, poverty, and other possible groups of interest. The information provided should clearly state the programs on which the expenditure is estimated and their share of the overall social protection expenditure.

Finally, survey data could be used to produce measures of the adequacy of social protection programs. For example, it is possible to compute the ratio of average pension payments in the 5 or 10 years after pension age to wage income in the 5 to 10 years before reaching pension age.

## Impact of Social Protection on Poverty and Inequality

The impact of social protection on poverty and inequality can be measured through a simple static simulation. A simulated level of income or consumption expenditure showing the hypothetical household welfare level without social protection is obtained by social protection transfers and computing poverty and inequality rates with and without them. It is possible to compute this analysis by excluding pension social insurance transfers or focusing only on certain transfers. The rationale for seeing the impact of social insurance pensions is that they can be viewed as intertemporal transfers involving the same people; whereas, social assistance transfers are across people within the year of analysis. Finally, it is possible to analyze the impact of social protection transfers across different population subgroups (for example, households with children).

The impact on poverty can be measured using both the national and relative poverty lines.

Overall, the assumption is that social protection should contribute to reducing both poverty and inequality, and that transfers that exclude social insurance pension payments should have a relatively larger impact. However, this can be measured and monitored.

## Current Impact of Adverse Risks

It is also useful to determine the impact that dealing with certain shocks has on poverty. The most common shocks likely to be measured are health expenditure shocks and, possibly, disability-related expenditure. Moreover, if information is collected, it may also be possible to look at the impact of other shocks that occurred during the survey period, such as macroeconomic shocks that led to high inflation or drought or flood events.

Regarding health expenditure, if there is good health protection, people should not face impoverishing or catastrophic health expenditures. The effect of impoverishing health expenditure can be measured as the percentage of people whose expenditure is above the poverty line, but falls below it after deducting health expenditure. Similarly, it is possible to do the same for disability-related expenses incurred for health care and other related expenditures on human assistance, assistive products, and rehabilitation.

For other shocks, it should be possible to determine whether experiencing certain shocks is associated with higher poverty rates and, indirectly, whether social protection interventions prevented them.

## Gaps in Participation Between Vulnerable Groups and the Rest of the Population

If social protection is successful, it is reasonable to expect that gaps in social participation between vulnerable groups and the rest of the population will be gradually reduced. Nevertheless, it is recognized that social protection is not the only factor at play, as broader social and economic policies can influence these outcomes, and some gaps may still result from stigma and exclusion beyond monetary and in-kind contributions. Nevertheless, measuring existing gaps and measuring them over time can indirectly reveal the possible effect of social protection programs.

The two most important forms of social participation are school attendance when people are of school age and work participation when they are of working age. Therefore, it is relevant to look at the percentage of people not attending school by comparing people from certain vulnerable groups and others, and the same can be done for employment or other social participation indicators that might be available in the survey, such as whether people receive health care when they need it or forgo health treatment.

All these steps are guided by program templates, which describe estimates that can be computed using ADePT.

Finally, there will be outcome indicators that are not computed from this household survey but come from other surveys, such as the demographic health surveys or the multiple indicator cluster surveys. However, for these surveys, it is not necessary to obtain microdata, and instead, it is possible to rely on the produced estimates. The indicators of interest are the following:

- United Nations Department of Economic Affairs. [SDG Database](#). Health service coverage index (SDG indicator 3.8.1).
- World Health Organization. [Global Health Expenditure Database](#). Out-of-pocket health expenditure as a percentage of all health expenditure.

# REPORTING AND USE OF THE SOCIAL PROTECTION INDICATORS OF COVERAGE AND EFFECTIVENESS



When the analysis is completed, it should be used to generate a country report and a shorter social protection country profile. There are different audiences for these reports. The primary audience is the policymakers in the country to whom the report should be presented and discussed. Secondly, these reports could be useful for practitioners and researchers.

Data from different countries can also be used to produce regional reports, analyze common patterns and findings across countries, or simply highlight successful experiences from one country that could be useful for others.

This section describes the structure of the expected country report and summary profile, as well as the expected regional analytical reports to be produced from country reports.

## 5.1 Social Protection Country Report and Country Profile

Based on information gathered for the country's social protection assessment, a social protection country report should be developed containing the main results of the analysis.

The report should follow a standard format and be divided into five main sections: (i) highlights of the key messages and interpretation from the analysis, (ii) background on the country, (iii) information on inputs, (iv) output estimates, and (v) outcome indicators.

The country's basic indicators should include estimates of the percentages of the population in different groups of interest, as well as key indicators describing the level of the country's development.

The section on input indicators should provide information on overall social protection expenditure and compare it with previous social protection assessments, with a breakdown of the share of different categories of social protection expenditure. It should also describe the most important social protection programs, provide a description of health protection, and provide detailed information on at least five main social protection programs.

A diagram showing the main agencies involved in social protection in the country would also be very useful, highlighting each agency's specific responsibilities. It would also be important to discuss the main changes in program design that have occurred in recent years and, possibly, institutional changes.

The output indicators section needs to present the following: (i) results on the SPI, disaggregating potential coverage (breadth) and average expenditure (depth) by need (excluding health); (ii) the relative focus of social protection expenditure on different vulnerable groups; (iii) the SPI including health and the estimate of population health coverage, based on social health insurance or alternative measures; and (iv) the social protection comprehensiveness measure/spider web. When available, potential coverage estimates from the SPI should be complemented by those obtained from household surveys, including information on population coverage for essential health services based on tracer interventions (SDG indicator 3.8.1) and information on trends in out-of-pocket health expenditure. A separate subsection should discuss social insurance protection among the employed population and whether the country has developed a shock-responsive social protection system.

Finally, the outcome section should summarize the results of the analysis of household survey data and, whenever available (at least for key indicators), provide information on how estimates have changed. The indicators could be organized into three subsections: (i) simulated impact of social protection on poverty and inequality, including for relevant subgroups of the population; (ii) impact on reduced risks; and (iii) comparison levels of participation and well-being indicators between vulnerable groups and the rest of the population.

From the country report, a more streamlined country profile could also be written, capturing only the key information, focusing on indicators, and referring to the country report for explanations and the more in-depth analysis.

The country analysis is independent of regional reports, which has the advantage that, as soon as a regional report is completed, data for the specific country and the related reports can be made available. This should ensure that information is more up to date and relevant for potential users.

## 5.2 Cross-Country Analysis and Regional Reports

Calculating SPICES indicators across a range of countries offers the opportunity to conduct subregional or regional comparisons, as well as comparative benchmarking across groups of countries. At the same time, SPICES supports thematic analysis, including needs-based assessments, analysis of coverage and effectiveness, distributional perspectives across population groups, and exploration of relationships between key indicators. Together, these applications allow SPICES to be used flexibly for descriptive and exploratory analysis to inform policy dialogue at national and regional levels.

There is a considerable advantage in conducting cross-country analysis when methodologies and frameworks are the same across countries. Therefore, once a certain number of country reports are completed, there is scope to compare and identify emerging regional patterns and more general lessons that can be drawn from the data. For example, it might be relevant to compare countries with similar levels of GDP per capita but very different social protection expenditure levels or compositions, and to assess the consequences on key outcome indicators.

When data allow, it will be possible to assess the relationships between social protection expenditure and poverty and inequality levels, and between social protection expenditure and population coverage, the extent of coverage, and the size of average expenditure.

Finally, if some countries achieve very good results in addressing specific social protection needs, this could trigger an in-depth analysis that provides lessons for other countries.



## **Social Protection Indicators of Coverage and Effectiveness**

### *A Tool for Social Protection Assessment*

The Social Protection Indicators of Coverage and Effectiveness (SPICES) is a methodology developed by the Asian Development Bank to assess social protection systems. SPICES provides a practical approach that links inputs, outputs, and outcomes to evaluate system performance. By organizing analysis around population needs—such as old age, disability, unemployment, and poverty—the SPICES framework enables policy-relevant diagnostics of coverage, adequacy, and impact on poverty and inequality, thereby supporting evidence-based decision-making.

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