



Investment Needs to Achieve the Sustainable Development Goals

Understanding the Billions and Trillions

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Summary for Policymakers

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Summary for policymakers

To achieve the Sustainable Development Goals (SDGs) by 2030, countries will need to develop long-term strategies that take the goals seriously as time-bound, quantitative objectives. On current trends the world will miss the goals by a wide margin unless policies are improved, international cooperation is enhanced, and more public and private resources are brought to bear on financing the investments needed to achieve the SDGs. Focusing on the marginal expansion of government services will not be sufficient to reach the SDGs. Instead it will be essential to work backwards from the SDGs to map out the required interventions, policies, and associated investments. This paper analyses the financing implications of taking the SDGs seriously as quantitative objectives to be achieved by 2030.

SDG strategies must include methodologies for working backwards from the goals required to operationalize ambitious long-term goals (“back-castings”) and for estimating associated investment needs (“needs assessments”). These were pioneered in the early 2000s for the health sector and later applied to the Millennium Development Goals (MDGs), and now have been developed for most MDG investment areas. Today, each investment area covered by the SDGs has one or more needs assessments. Such sector needs assessments are important (i) to show how the SDGs can be achieved and to identify knowledge gaps in our understanding of implementation strategies or “production functions;” (ii) to understand opportunities for private financing and policies needed to support private investments in the SDGs; (iii) to estimate domestic public financing and residual international co-financing needs; and (iv) to support resource mobilization and provide an accountability framework.

SDG sector needs assessments should employ similar sets of assumptions and generate results that can be compared and aggregated with ease. Success in achieving the SDGs will require higher-quality assessments in many areas as well as a shared understanding of appropriate methodologies. Sound SDG needs assessments must be based on a clear understanding of the nature of interventions and investments that must be delivered to achieve the SDGs (the “SDG production function”); integrate climate change mitigation and adaptation in a consistent and rigorous manner; address gaps, overlaps, and synergies across investment areas; and generate transparent results that can be reviewed by others and can form the basis for an SDG financing strategy.

This paper proposes an analytical framework for conducting and comparing SDG needs assessments and applies it to available sector studies, presenting the first comprehensive needs assessment for the SDGs. The framework translates the 17 SDGs into eleven “SDG investment areas”: (i) health, (ii) education, (iii) social protection, (iv) food security and sustainable agriculture, (v) energy access and low-carbon energy infrastructure, (vi) water and sanitation, (vii) transport infrastructure, (viii) telecommunications infrastructure, (ix) ecosystem services and biodiversity, (x) data for the SDGs, and (xi) emergency response and humanitarian work. Investment needs for climate change adaptation and mitigation are integrated into each SDG investment area. The framework identifies appropriate needs assessment methodologies and explains how SDG needs assessments can address other cross-cutting issues, such as ending poverty, gender equality, inequalities, cities and human settlements, sustainable

consumption and production, and government functions. The paper then harmonizes assumptions across the sector needs assessments and – to the extent possible – addresses overlaps, gaps, and synergies across SDG investment areas. Implications of economy-wide effects, such as shifts in real wages or real exchange rates across an economy, on SDG needs assessments are discussed, though not modeled quantitatively.

The quality of available needs assessments varies considerably across the SDG investment areas.

Needs assessments in the social sectors – particularly health, but also education – tend to be strongest, while needs assessments for the environment, infrastructure, agriculture, and food security are weakest. Investment needs for social protection remain to be estimated and constitute an important gap in this analysis. Since estimates of financing needs for infrastructure account for the vast majority of total investment needs, their lack of robustness is particularly problematic. The analytical framework also underscores that many SDG needs assessments do not systematically integrate climate change adaptation and mitigation.

On the basis of available needs assessments the study concludes that low- and lower-middle-income countries may need to increase public and private expenditure by some \$₂₀₁₃1.3 trillion per year (\$342 – 355 billion for LICs and \$903 – 938 billion for LMICs) in order to reach the SDGs.² This corresponds to 4 percent of these countries’ estimated GDP over the period measured in purchasing power parity (PPP) and 11 percent of GDP in international dollars, or 0.7 – 1.1 percent of world GDP. Table 1 summarizes preliminary investment needs by sector and describes the share of investments that can likely be financed through private resources (41 – 50 percent on average). At the global level an incremental 1.3 – 2.0 percent of world GDP may be required to finance the achievement of the SDGs in all countries.

Low-income countries will require substantial international co-financing to achieve the SDGs, and lower-middle-income countries may need some financial support during the initial SDG period. A preliminary financing analysis suggests that major increases in domestic resource mobilization are possible in developing countries. Lower-middle-income countries have the potential to self-finance the achievement of the SDGs, perhaps requiring some international public co-financing during the early years of SDG implementation. Low-income countries cannot meet the investment needs on their own and may require some \$130 – 160 billion in international public co-financing. This corresponds to 0.08 – 0.13 percent of estimated average world GDP over the period or 0.23 percent of high-income countries’ estimated GDP averaged over the period. Further analysis is required to confirm these preliminary estimates, which depend heavily on assumptions about future economic growth, and to specify the type of international co-financing required. It is plausible, though, that this financing gap can be met through concessional international public finance, including promised volumes of Official Development Assistance.

² These estimates do not include incremental investment needs for social protection systems as well as climate change adaptation and mitigation measures associated with the improved management of ecosystems. Note also that this paper employs a broad definition of “SDG investments” that includes operating expenditures for social services and infrastructure. So the investment shares of GDP cannot be compared with traditional macroeconomic investment ratios that including only expenditures on fixed capital.

Table 1. Summary of incremental SDG investment needs in low- and lower-middle-income countries (average for 2015 – 2030 in \$₂₀₁₃ billion)

| Investment area | "Development" investment needs | Incremental climate mitigation and adaptation investment needs | Total investment needs | Private, commercial financing (%) | Private, commercial financing | Public financing |
|--|--------------------------------|--|------------------------|-----------------------------------|-------------------------------|--------------------|
| Health | 68 - 87 | 1 - 1.4 | 69 - 89 | 0% | 0 | 69 - 89 |
| Education | 194 | 0 | 194 | 0% | 0 | 194 |
| Social protection | ? | ? | ? | ? | ? | ? |
| Agriculture and food security | [125] | [22] | [148] | [51%] | [75] | [73] |
| Access to modern energy | 257 - 278 | 51 - 55 | 308 - 333 | [55 - 59%] | 169 - 196 | 137 - 138 |
| <i>Access to electricity and clean cooking fuels</i> | 54 - 71 | 10 - 14 | 64 - 85 | [40 - 50%] | 26 - 42 | 38 - 42 |
| <i>Power infrastructure</i> | [203 - 207] | [41] | [244 - 248] | [59 - 62%] | [144 - 154] | [94 - 100] |
| Access to water and sanitation | 29 | 13 - 16 | 43 - 46 | [5 - 26%] | 2 - 12 | 34 - 40 |
| <i>Basic water supply & adequate sanitation</i> | 28 | 6 | 34 | [0 - 20%] | 0 - 7 | 27 - 34 |
| <i>Water and sanitation infrastructure</i> | [1] | [8 - 11] | [9 - 12] | [24 - 44%] | [2 - 5] | [7] |
| Telecommunications infrastructure | [361] | [72] | [434] | [52 - 68%] | [225 - 295] | [139 - 208] |
| Transport infrastructure | [189] | [0] | [189] | [54 - 84%] | [102 - 159] | [30 - 87] |
| Ecosystems, incl. biodiversity | [21 - 28] | ? | [21 - 28] | [15%] | [3 - 4] | [18 - 24] |
| Data for the SDGs | 0.4 | 0 | 0.4 | [0%] | 0 | 0.4 |
| Emergency response and humanitarian work* | 8 - 23 | ? | [8 - 23] | [0%] | [0] | [8 - 23] |
| All SDG investment areas** | 1253 - 1316 | 160 - 167 | 1413 - 1483 | [41 - 50%] | 577 - 741 | 743 - 836 |

Source: Author's calculations and sources identified in the paper.

Note: Numbers have been rounded and may not add up exactly. See tables 14 and 15 for more details.

* Emergency response and humanitarian work will be entirely funded by concessional public international financing and cannot be disaggregated by income group.

** This total excludes several SDG investment needs identified in this paper, including social protection and incremental investment needs for climate change mitigation and adaptation for ecosystems. Total does not equal sum of LICs and LMICs since cost of emergency response and humanitarian work is allocated to total only.

This paper outlines an indicative financing strategy for the SDGs, recognizing the complementarity and limited substitutability between public and private resources for development. While trillions of dollars will be required in incremental investments to achieve all SDGs public financing needs for health, education, and other services are in the order of tens of billions. It is important not to confound these investment needs since each sector will require a different resource mobilization strategy. This paper aims to disentangle the different types of financing needs by presenting tentative estimates of the public and private shares in investments across the different SDG investment areas. It is the first to consider domestic resource mobilization and other financing strategies in the context of the overall SDG investment needs.

The analysis suggests that the SDGs are affordable globally. Financing needs for the SDGs are manageable given the extent of available global savings. Meeting the goals is therefore – first – a moral challenge of re-directing resources towards the societal objectives enshrined in the SDGs and – second – a practical challenge of organization, sound implementation frameworks, and careful implementation.

The health sector demonstrates how SDG needs assessments can play a vital role in addressing both the moral and operational challenges of SDG implementation. Health has successfully used needs assessments and back-castings to operationalize ambitious global health goals and to demonstrate the feasibility of rapid progress in reducing preventable causes of deaths. The sector has been using needs assessments to find answers to the practical challenges of implementation, set global policy standards, and help propagate this learning throughout developing and developed countries. In this process, needs assessments have become increasingly robust, and their findings have been buttressed by implementation lessons. The leading financing institutions in health, including the Global Fund to Fight AIDS, Tuberculosis and Malaria, Gavi, and the recently launched Global Finance Facility have all used needs assessments to make a strong case for investments in health and to mobilize vast increases in domestic and international resources for the sector. A key question for SDG implementation is therefore how lessons from the successes in health can be applied to other SDG priorities.

Four priorities for future research emerge from the analysis presented in this paper. First, sector needs assessments must be strengthened for most SDG investment areas, but particularly for food security and agriculture, infrastructure, and ecosystem services. Remaining gaps, such as investment needs for social protection, must be filled. Second, countries need to develop national SDG needs assessments, which offer a critical opportunity to better understand the impacts of synergies and economy-wide effects. Third, a more robust financing strategy is needed to distinguish between different types of financial flows, their sequencing, opportunities for public and private debt financing, and the role of multilateral development banks and other financing institutions. Finally, the international system should systematically track public and private investments in the SDGs and compare these flows against projected investments needs from SDG needs assessments. This will help refine our understanding of how the SDGs can be achieved, whether the world is on track towards achieving the Goals, and what changes might be needed in implementing the global partnership for the SDGs.

We underscore the preliminary and incomplete nature of this analysis and welcome comments and suggestions for improvement. Such comments should be addressed to info@unsdsn.org.