

**Inter-Agency and Expert Group on Sustainable Development Goal Indicators
Working Group on Measurement of Development Support**

**Research note:
Measuring International Public Goods in the Context of the SDG Indicators**

December 2020

Introduction

The Working Group's core task is to suggest an indicator or indicators to measure progress against SDG Target 17.3, "Mobilize additional financial resources for developing countries from multiple sources".

At its sixth meeting on 20 November 2020, members of the Group expressed various views on the feasibility and desirability of including "international public goods" among the sub-indicator(s) the Group would eventually recommend.

International public goods are one of three topics that the Group has already placed on its Research Agenda, along with South-South cooperation (SSC) and mobilized private finance. A Sub-group is now being established to consider SSC, and there is already a research note and some comments on mobilized private finance on the Group's wiki platform. At the conclusion of the Group's discussion of international public goods on 20 November, one of the Co-Chairs proposed to prepare a research note as a means of advancing the Group's consideration of this issue. The present note, prepared by the Secretariat under the direction of the Co-Chairs, responds to this suggestion.

From public goods to international public goods

Public goods are traditionally defined as being "non-rival" (meaning that one person's enjoyment of them does not reduce their availability to others) and "non-excludable" (meaning that access for one implies access for all). Traditional examples include street lighting, lighthouses, police protection, or national defense.

International public goods are public goods with an international dimension. Examples include protecting biodiversity or the global climate, reducing cross-border pollution, repressing communicable diseases, developing rules for international travel or trade, or protecting human rights.

Difficulties of defining and measuring international public goods

Upon inspection, it is clear that each of the three elements of the term "international public goods" has a fuzzy boundary, thus:

International: Many public goods have local, national, and international dimensions. For example, a lighthouse may serve local, national or international shipping, in various proportions. Communicable diseases also have local, national and international dimensions. Concepts of "basic human rights" and their protection may differ between individuals and communities, as well as internationally. Pollution may have mainly local effects, but also various levels of national and international effects.

Public: Whether a good is private or public may be considered either at the point of production or at the point of use or benefit. Many items that have traditionally been produced publicly, such as roads, security services, and some utilities, may also be provided privately. Education and health services

are private goods for each individual, but may constitute public goods in so far as they promote the spread of knowledge, or the health and well-being of others.

Goods: Most people’s idea of “goods” is of tangible objects for sale. But public goods clearly include services, amenities and conditions, many of which have no price and some which have no cost. Some goods are produced or ensured by humans, while others, such as air, are natural endowments. Some goods are merely the absence of “bads” like pollution, disease, or violence. Enumerations of international public goods may go beyond final conditions (e.g. health, security) to also include means of assuring them (drugs, vaccines, police and other security services) – often without considering the degree to which the means are effective or may have unwanted side-effects (cf. Kaul et al, 1999:13-4).

In addition to the above, the term “global public goods” is more common than “international public goods”. Sometimes, these terms are carefully distinguished; more often, they are synonymous; occasionally, global public goods are taken to encompass public goods at all levels (e.g. Kaul et al., 2003:14). Most often, global public goods are understood as public goods for the entire globe, i.e. all countries benefit from them and hence they could be viewed, by their very definition, as not compliant with the specific focus of target 17.3 on developing countries. Therefore, and consistent with the Working Group’s Terms of Reference, this note uses the term international public goods, meaning goods the benefits of which are enjoyed by citizens of more than one country, which could potentially include only developing countries or regions, but could also include all countries, including developed countries.

A further difficulty in measuring *support* for international public goods is the variety of instruments used to promote them, which may, in addition to financial contributions, subsidies and compensation, include non-flow or negative-flow instruments such as laws, treaties, regulations, conferral of property rights, or imposition of fees and charges (Kaul et al, 2003:33-4).

Enumerations of international public goods

Given the vagueness and porosity of the concept of international public goods, it is not surprising that the literature about them focuses more on case studies, and methods of promoting particular goods, than on precise enumeration or delineation of the field of such goods. Studies conducted under UN auspices (Kaul et al., 1999, 2003 and 2006) have, for example, identified and discussed the provision of such goods as:

- International financial stability and market efficiency
- The multilateral trade regime
- Communicable disease control
- Conserving biodiversity
- Tackling climate change
- Protecting the ozone layer
- Reforming intellectual property laws
- Eliminating corruption
- Promoting the rule of law and universal human rights

At various times, lists of IPGs have also included the promotion of knowledge and technology transfer, and boosting the standing, reach or functioning of international organizations. More recent additions to the roster include combating terrorism and reinforcing global cyber-security.

Efforts to measure support for international public goods in the SDG indicators

While there appears to be no comprehensive measurement of support for international public goods, the SDG indicators already aim to track flows associated with several individual IPGs, including:

Climate change: In 2009-10, developed-country parties to the United Nations Framework Convention on Climate Change committed to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries. Performance under this target and subsequent funding commitments is measured under SDG indicator 13.a.1, “Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025”. For a brief recent discussion of issues in the measurement of the UNFCCC target, see Mitchell et al. (2020).

Technology transfer: SDG Target 17.7 aims to “Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms...” and indicator 17.7.1 is to measure the “Total amount of funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies”.

International financial stability: SDG Target 17.13 is to “Enhance global macroeconomic stability, including through policy coordination and policy coherence” and is to be measured using the World Bank’s financial dashboard (indicator 17.13.1).

It might be noted that all three of these indicators, as well as numerous governance, rule-of-law, human rights and corruption indicators under Goal 16, are still classified Tier II, implying that data are not regularly produced by all countries. In fact, the SDG global database does not yet contain data on indicators 13.a.1, 17.7.1, 17.13.1. Numerous indicators under Goal 16 also lack data, and in any case these indicators do not concern external financing. The OECD (2019) has, however, estimated total climate finance provided and mobilized by developed countries for developing countries for the years 2013 to 2017, calculating \$71.2 billion for 2017.

Other attempts to measure support to developing countries in terms of international public goods

So far, there does not appear to be any single widely accepted global measure of support to developing countries in the form of IPGs that benefit or may benefit them.

Initial attempts focused on the identification of IPGs within existing aid programmes, meaning that this is support specifically for developing countries, but it is not additional support. An early effort under UNDP auspices (Birdsall in Kaul and Conceição, 2006) focused on the concept on regional public goods for developing countries, and presented three alternative methods that gave widely differing results. On a broad conception which included all aid to sectors which could be considered as regional public goods or global public goods, aid commitments were estimated at \$15 billion in 2002 (ibid.: 531). When the definition was limited to projects with clear transborder properties, the figure fell to \$6 billion. On a still narrower definition, limiting consideration to regional projects, the figure fell to \$3 billion.

These figures were based on data on official bilateral and multilateral aid activities. By their nature, public goods are most often provided by governments or official agencies, and so it was natural for attempts to measure support for international public goods for developing countries to focus largely on official foreign aid programs; though private funding, e.g. by the Gates Foundation, is now also substantial.

The most widely used source to date for estimates of IPG support to developing countries has been data on official development assistance (ODA), which measures concessional resource flows by governments that have “the economic development and welfare of developing countries” as their “main objective”. ODA does capture activities that may be considered international public goods as long as these activities primarily benefit developing countries.

Accordingly, ODA includes assistance to developing countries to mitigate or adapt to climate change. It also includes spending on infectious disease control, crop development, general development research, and contributions to international organizations – but only to the extent that these can be demonstrated to be primarily aimed at benefiting developing countries. Somewhat more controversially, ODA includes maintenance costs of refugees from developing countries for the first 12 months of their stay in the donor country, and subsequent resettlement costs if the refugee returns to the home country or another developing country.

More recent attempts to measure external financial transfers for IPGs using ODA data include those by the Center for Global Development (Birdsall and Diofasi, 2015) and Development Initiatives (2016), both of which arrived at estimates in the range of \$10-14 billion annually for the early 2010s. These studies have refined somewhat the coverage of items considered to be IPGs, though numerous “judgment calls” were still required and performed.

A different approach is taken in the new measure of Total Official Support to Sustainable Development (**TOSSD**) which in addition to cross-border resources (Pillar I) has a special category for expenditures for international public goods and global challenges (Pillar II).

Eligibility of IPGs under TOSSD Pillar II is much wider than under ODA, since it includes expenditures in the provider country or other developed countries with actual or potential benefits to developing countries but also with benefits to developed countries such as:

- Research and knowledge creation on climate change mitigation and adaptation as long as they aim to ensure that the results are available for populations and scientists worldwide.
- Protection and/or enhancement of greenhouse gas (GHG) sinks and reservoirs (e.g. carbon capture and storage, reforestation), on the basis that this directly contributes to the removal of GHGs from the atmosphere, benefitting all countries of the world.
- Activities that limit anthropogenic emission of GHGs, including gases regulated by the Montreal protocol.
- Costs of basic research, defined as experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts without any particular application or use in view, provided the subject is SDG-related and potentially applicable to more than one country, including at least one TOSSD-eligible country, and subject to certain conditions concerning accessibility of the results.
- Costs of hosting developing country refugees beyond the first 12 months of stay, as long as the refugee remains without the rights and obligations of residency or nationality.
- Broader coverage of contributions to peace and security operations than under ODA.

In addition, TOSSD coverage goes beyond the official, concessional flows in ODA to also include non-concessional official and mobilized private flows. The 2019 TOSSD data survey (OECD, 2020b) found \$80 billion of Pillar II TOSSD for international public goods in 2017, \$54.5 billion being public finance, about half of it from multilateral institutions. This figure includes “global challenges” (issues or concerns that bring disutility on a global scale and that need to be addressed globally), but excludes activities in Pillar I that support the provision of IPGs within the jurisdiction of TOSSD-eligible countries, such as support to projects in those countries that mitigate greenhouse gas emissions.

The wide differences in estimates of external finance of IPGs arise from a variety of factors, including the selection and definition of the IPGs being financed, the strictness of the requirement to benefit developing countries, and the inclusion or exclusion of private and non-concessional official flows.

All the above quoted estimates of IPGs are fairly small – considerably smaller than the total figure for even net ODA. However, considering the conceptual (economic textbook) definition of IPGs (“non-rival” and “non-excludable” in consumption) the value of IPGs may rather go into the trillions when for example considering all climate change-mitigation efforts and all R&D. This may still be so even if efforts continue to focus on trying to identify those parts of IPGs that are of particular benefit to

developing countries, rather than trying to measure all IPG expenditures. Therefore, the above attempts of identifying parts of IPGs that are of particular benefit to developing countries as part of development support cover only a small part of the universe of expenditures for IPGs.

Conclusion

While “international public goods”, or more often “global public goods” have been widely discussed in the economic literature, their precise delineation for the purpose of the measurement of development support has proved elusive so far. They may be a moving target, which is gradually evolving in response to changes in political, economic, social, environmental and technological conditions. The SDG indicators already aim to measure support for several IPGs, though data availability on these indicators is not universal. Support for a variety of IPGs is included under ODA, but only where the main objective of the support is to promote the economic development and welfare of developing countries. Pillar II of TOSSD offers a broader coverage of IPG expenditures, including support for goods that are relevant to and available to developing countries but also in many cases benefit developed countries.

Given the breadth and the vague boundaries of the concept of international public goods for the measurement of development support, finding a suitable sub-indicator for SDG purposes may depend on being able to closely circumscribe both the targeted goods and the types of finance eligible to be considered as development support. In this perspective, a central tension which would need to be resolved is that between the nature of public goods as non-excludable and the specific focus of Target 17.3 on resources “for developing countries”.

References/Further reading

Birdsall, N. and A. Diofasi, *Global Public Goods for Development: How Much and What For*, Center for Global Development, Washington, 2015. <https://www.cgdev.org/publication/global-public-goods-development-how-much-and-what>

Development Initiatives, *Measuring Aid to Global Public Goods (GPGs)*. Bristol, 2015. <http://devinit.org/wp-content/uploads/2016/07/Measuring-aid-to-global-public-goods-GPGs-Discussion-paper-July-2016.pdf>

International Task Force on Global Public Goods, *Meeting Global Challenges: International Cooperation in the National Interest: Summary Report of International Task Force on Global Public Goods*. Stockholm, 2006. https://www.keionline.org/misc-docs/socialgoods/International-Task-Force-on-Global-Public-Goods_2006.pdf

Kaul, I. and P. Conceição (editors), *The New Public Finance: Responding to Global Challenges*, Oxford University Press, New York, 2006. <https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780195179972.001.0001/acprof-9780195179972>

Kaul, I., P. Conceição, K. Le Goulven, R. Mendoza (editors), *Providing Global Public Goods: Managing Globalization*. Oxford University Press, New York, 2003. <https://oxford.universitypressscholarship.com/view/10.1093/0195157400.001.0001/acprof-9780195157406?result=2&rskey=V2iFMn>

Kaul, I., I. Grunberg and M. Stern (editors), *Global Public Goods: International Cooperation in the 21st Century*. Oxford University Press, New York, 1999.

<https://oxford.universitypressscholarship.com/view/10.1093/0195130529.001.0001/acprof-9780195130522>

Mitchell, I., A. Tahmasebi, R. Calleja, E. Ritchie, *Improving the measurement of climate finance and progress on the \$100bn target*, Center for Global Development, London, 2020.

https://unfccc.int/sites/default/files/resource/How%20to%20measure%20climate%20finance_UNFCC_C_Oct2020.pdf

Morrissey, O., D.W te Velde and A. Hewitt, *Defining International Public Goods: Conceptual Issues*. Overseas Development Institute, London, n.d. <https://www.keionline.org/misc-docs/socialgoods/Morrissey-Defining-International-Public-Goods.pdf>

OECD, *TOSSD data collection in 2020 on 2019 resources: Explanatory notes*. Paris, 2020a. <http://www.oecd.org/dac/tossd/TOSSD-data-collection-explanatory-notes.pdf>

OECD, *Lessons learnt from the 2019 Total Official Support for Sustainable Development (TOSSD) Data Survey*, Paris, 2020b. <https://www.oecd-ilibrary.org/docserver/0cd3da6b-en.pdf?expires=1606475050&id=id&accname=guest&checksum=6FB3993BDE531E9B03E615F88B935F59>

OECD, *Climate Finance Provided and Mobilised by Developed Countries in 2013-17*, Paris, 2019. <https://www.oecd-ilibrary.org/docserver/39faf4a7-en.pdf?expires=1606475455&id=id&accname=guest&checksum=F88B56D75F6694DFD1CA1538257AA391>

OECD, *TOSSD Reporting Instructions*. Paris, 2020. http://www.oecd.org/dac/tossd/TOSSD%20Reporting%20Instructions_February%202020.pdf

OECD, *Converged Statistical Reporting Directives for the Creditor Reporting System and the Annual DAC Questionnaire*. Paris, 2018. [https://one.oecd.org/document/DCD/DAC/STAT\(2018\)9/FINAL/en/pdf](https://one.oecd.org/document/DCD/DAC/STAT(2018)9/FINAL/en/pdf)

Stiglitz, J., *International Public Goods and the Architecture of International Organisations*. United Nations Background Paper 7, Department for Economic and Social Information and Policy Analysis, Helsinki, 1995. < <https://digitallibrary.un.org/record/768013?ln=en>>