

# Measuring aid to global public goods (GPGs)

An approach to estimating funding for GPGs from providers of official development assistance

**2016**  
July

Our vision is a world without poverty that invests in human security, where everyone shares the benefits of opportunity and growth



[www.devinit.org](http://www.devinit.org)

## Contents

<b>Executive summary</b> .....	<b>3</b>
Definitions and themes.....	3
Key findings: ODA to GPGs in 2014 .....	4
GPG's definition and data limitations.....	5
Key recommendations.....	6
<b>Introduction: why look at ODA to GPGs?</b> .....	<b>7</b>
<b>Defining global public goods</b> .....	<b>8</b>
The concept of GPGs used in this paper.....	8
<b>GPG themes</b> .....	<b>9</b>
The eight GPG themes:.....	10
<b>Estimation methodology</b> .....	<b>12</b>
<b>Data analysis breakdown</b> .....	<b>13</b>
How much ODA for GPGs is there, and what is it funding?.....	13
GPGs by broad theme and sub-theme, 2014.....	14
<b>Aid for GPGs by sector</b> .....	<b>15</b>
<b>Who receives aid for GPGs</b> .....	<b>16</b>
<b>Who provides aid for GPGs?</b> .....	<b>17</b>
<b>Modalities for ODA to GPGs:</b> .....	<b>17</b>
<b>How is aid for GPGs delivered?</b> .....	<b>18</b>
<b>In focus: Research as a GPG</b> .....	<b>19</b>
<b>Discussion of methodological limitations</b> .....	<b>21</b>
<b>Estimating ODA for climate change mitigation is challenging</b> .....	<b>21</b>
<b>The World Bank's role in providing GPGs may be even more significant than the data tells us</b> .....	<b>22</b>
<b>Lack of an accepted definition of GPGs hampers conclusive estimates and brings specific challenges</b> .....	<b>22</b>
Global financial systems.....	22
STD control including HIV/AIDS .....	23
Administrative costs of donors .....	23
National/regional to global-level impacts .....	23
Policy markers.....	23
Other reporting quality issues .....	24
<b>Conclusions and questions for future research</b> .....	<b>24</b>
<b>Contact</b> .....	<b>25</b>
<b>Appendices</b> .....	<b>26</b>
<b>Decision-making</b> .....	<b>26</b>
<b>GPG definition methodology by theme and sub-theme mapping onto CRS27</b> .....	<b>26</b>
<b>Overlap categorisations</b> .....	<b>29</b>
<b>Results by GPG broad theme and sub-theme</b> .....	<b>29</b>

## Executive summary

This discussion paper looks at global public goods (GPGs) and the role of official development assistance (ODA) in providing them. 'Public goods' is a theoretical economic concept used to describe goods holding the properties that, firstly, no one can be excluded from their benefits and, secondly, that these goods are not used up in the process of being consumed or utilised. Scaling this definition up to the global level brings together a diverse – and at times interrelated – set of themes that tie into many current global challenges: climate change mitigation, communicable disease prevention and global peace and security can all represent GPGs.

A range of actors including governments, multilateral organisations and private organisations can play a role in providing GPGs. The future financing of GPGs will overlap with the financing of several of the Sustainable Development Goals (SDGs), particularly because of the increased focus on global as well as national challenges in the latter. One mode of financing, ODA, is well positioned to play a role as a funding source for certain GPGs; it is administered with a main objective to promote the economic development and welfare of developing countries, enabling it to be targeted towards funding specific GPGs and desired outcomes. However, ODA is increasingly recognised as a scarce and precious resource with competing demands. Attention is therefore turning to asking what role development cooperation should play in providing GPGs and how other forms of finance can also support such investments,<sup>1,2</sup>

This discussion paper presents an analytical approach to assessing ODA for GPGs, and identifies a number of themes and sub-themes that represent different types of GPGs. Using this approach results in an estimate of total ODA to GPGs of US\$12.9 billion in 2014, making up 8% of total ODA. This paper concludes that the majority of aid flows contributing to GPGs are disbursed relating to the environment (including climate change mitigation) and a further significant proportion is targeted at health (including communicable disease prevention) and research. The paper also notes methodological, definitional and data limitations.

### Definitions and themes

**Global public goods/GPGs:** This discussion paper uses a definition of GPGs that broadly follows the economic definition and pre-existing literature's framework. Our analysis aims therefore to capture goods that are non-rival (consumption by one person does not diminish consumption by another), non-excludable (no one can be excluded from their benefits) and cover more than one group of countries.

**Official development assistance/ODA:** This paper measures ODA to GPGs. ODA is defined by the Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) as flows provided by official agencies, administered with the main objective of promoting the economic development and welfare of developing countries, and concessional in character.

**GPG themes and sub-themes:** This paper identifies eight broad themes under which ODA can be directed to GPGs: environment, global public health, research, trade policy and transport policy, conflict peace and security, communications, humanitarian international non-governmental organisations (INGOs) and other.

## Eight global public goods themes



*Note:* 'Other' is a grouping of several GPG sub-themes – specifically narcotics control, international transparency and impact evaluation initiatives and international non-governmental organisations (INGOs) including those relating to human rights. Research GPGs can be included in multiple themes including global public health and environment; research not attributable to another GPG theme is under the 'Research' theme; some disbursements may overlap between themes; these are shown as mixed area GPGs.

Each theme groups together one or more sub-themes; and the sub-themes are *why* any particular activity is included as a GPG (for example, communicable disease prevention is categorised as a sub-theme and is the basis for selection as a GPG, and sits under the global public health theme alongside other health sub-themes such as health research). The 'Other' category groups together other GPG sub-themes that do not relate to a theme, such as some INGOs, narcotics control and international transparency and impact evaluation initiatives.

**Source of data and methodology:** The OECD's Creditor Reporting System (CRS) is the source dataset used in the analysis. This was selected for its high coverage ratio available on DAC members' aid – nearly 100% for the time period analysed.

Detailed ODA reporting fields available in the CRS (such as purpose codes, channels of delivery and policy markers) were mapped onto a thematic interpretation of GPGs to capture an estimate of ODA directed to GPGs.

### Key findings: ODA to GPGs in 2014

- ODA disbursements directed to GPGs stood at US\$12.9 billion in 2014. This is 8% of total ODA.
- The largest three broad GPG themes were **environment** (US\$8.0 billion), **global public health** (US\$2.1 billion) and **other (ie non-health/non-environment) research** (US\$1.1 billion).
- **Disbursements to the environment theme made up 62% (US\$8.0 billion) of total ODA to GPGs in 2014.** A significant proportion of this (over 80%) comprises activities marked to have a principal policy focus on climate change mitigation. Yet these figures are likely to be an underestimate as they do not capture mitigation financing activities from a number of multilateral development banks.

- **Total GPG ODA marked as research activities stood at US\$2 billion in 2014**, with US\$516 million in global public health and US\$315 million in environment. A quarter of estimated global public health GPG spending relates to research that is non-country specific.
- Over 40% of ODA to GPGs is categorised as benefitting several regions (49% capturing a broad range of GPG sub-themes) and country-level recipients (42%, mainly capturing climate change mitigation and biodiversity disbursements); the remaining 9% is disbursed to the regional level (predominantly captured by communicable disease prevention, climate change mitigation and biodiversity GPG themes).
- GPGs can include investments at the national level whose impact can spillover national borders. The largest five country-level recipients of GPGs ODA are all middle income countries: **India, Brazil, Turkey, Vietnam and Thailand**. This outcome is driven by the framing of national-level climate change mitigation disbursements as GPGs; these countries are receive significant amounts of climate change mitigation ODA.
- Results for the three OECD-defined sectors that received the most GPG ODA: **general environmental protection** (US\$3.2 billion), **energy** (US\$2.3 billion) and **transport and storage** (US\$1.4 billion) are driven by activities marked for climate change mitigation and as such are mostly captured under the environment GPG theme.
- The three donors of the most ODA directed to GPGs were **Germany** (US\$2.3 billion – 90% of which was to the environment theme), **Japan** (US\$2.2 billion – 95% to environment theme) and the **United States** (US; US\$1.7 billion – 47% to environment theme and 36% to the global public health theme).
- The largest channel of delivery for GPGs in 2014 was **public sector institutions** (US\$5.7 billion in total). **Multilateral organisations** were the second largest channel of delivery at US\$2.8 billion, of which US\$1.2 billion was channelled through the **United Nations** (UN) and US\$1.0 billion through the **World Bank**.
- Reporting on disbursements to the OECD climate change mitigation policy marker is limited and the figure used here is highly likely to be an underestimate. A number of multilateral organisations including development banks such as the World Bank use a separate reporting methodology – the multilateral development banks (MDBs) joint reporting methodology – and not all report to the marker (although they provide estimates on commitments). Other climate specific or climate-related multilateral funds use the climate change mitigation marker on commitments only.

## **GPG's definition and data limitations**

**Definitional limitations:** There is no fixed definition of what constitutes a GPG, which means that estimates in this analysis will differ from previous findings by other researchers.

Some areas defined as GPGs under the definition used may not be universally considered GPGs or may be considered as impure GPGs (non-rival but excludable (eg medical research impacting affected populations only) or non-excludable but rival (eg preservation of fish stocks).

On the other hand, the themes used do not expand to every referenced GPG – certain examples, such as administration costs to multilateral bodies whose work holds a global reach and international financial systems, are not included.

**Other reporting quality issues:** the methodology used relies on the quality of donor reporting to the OECD CRS. One area where this has limitations is in measuring ODA disbursements to climate change mitigation. Further, DAC policy markers are used in mapping parts of the GPG definition to the DAC data in this paper; however, policy marker reporting is subjective and use of policy markers can be considered to provide a best estimate as opposed to an exact amount.

## Key recommendations

Future global dialogue and action to improve the quality of data on ODA for some key GPG themes, such as climate change mitigation disbursements or ODA directed to strengthening international financial systems, can ensure a clearer picture and improve accountability of these funds.

Future dialogue around potential ODA directed to GPGs can inform changes to international development finance architecture and specifically could be linked to future updating of SDG-relevant purpose codes in the CRS at the OECD DAC, with the aim of improving the issues with accurately estimating ODA reported to policy markers.

Promoting further dialogue around not only what constitutes a GPG and agreeing a definition would be a useful entry point to a broader and more critical discussion about how the effectiveness and impact of ODA for GPGs can be assessed. This should aim for agreement between stakeholders on what should and should not be included in any potential measure. ODA investments in GPGs ultimately need to be supported by evidence that they are benefiting people facing poverty and vulnerability and that other resources are either not available or appropriate for such investments.

## Introduction: why look at ODA to GPGs?

The theoretical economic concept 'global public goods' (GPGs) is commonly used to define goods that are non-rival (consumption by one individual does not diminish consumption by another), non-excludable (no one can be excluded from their benefits) and that benefit more than one group of countries. It brings together a diverse – and at times interrelated – set of themes that tie into many current global challenges. Examples of GPGs include climate change mitigation, which involves human interventions to reduce or prevent greenhouse gas emissions, thereby limiting concentrations of greenhouse gas in the atmosphere and contributing to mitigating a shared global environmental issue. The generation of knowledge through research with potential worldwide use is another example of a GPG, because knowledge can be disseminated freely, and its use and associated benefits need not be limited to a fixed pool of people.

GPGs are not a new concept,<sup>3</sup> and the very notion of international borders brings challenges in reaching across them. For example, the first organised institutional attempts to control infectious disease were in response to the plague epidemic of 1347 to 1352, which spread across international borders throughout southern and central Europe after arriving by sea from the eastern Mediterranean region.<sup>4</sup> However, in an increasingly interlinked and globalised world, meeting demands for growing population sizes, offsetting the implications of stretched natural resource and land use, and global health and security threats have given rise to global challenges. The success of meeting these can require both a national-level and a collective supra-national response. Providing GPGs is part of this response. The framework of global policy design towards meeting these challenges, in particular around collective action, is crucial for success. The 2030 Agenda for Sustainable Development, which comprises 17 Sustainable Development Goals (SDGs), aims to guide policy and funding between 2015 and 2030. It frames ending poverty as 'the greatest global challenge' (paragraph 2) and identifies other cross-border challenges or risks needing international as well as national action. These include threats to diminishing natural resources (including conserving marine resources and halting biodiversity loss); global health threats (including combating communicable diseases) and climate change. The 2030 Agenda places a greater emphasis on goals that are global in scope and holds a higher degree of universality in its coverage than did its predecessor, the Millennium Development Goals (MDGs).<sup>5</sup>

Furthermore an increasingly strong case is being made for a political as well as an institutional shift towards incentivising 'collective outcomes' by member states, to tackle the root causes of global crises such as global health emergencies (for example; the Ebola virus disease outbreak), conflict and mass displacement.<sup>6</sup> Last year, the Addis Ababa Action Agenda called for a global collective approach to financing development and the creation of a sustainable economic environment. It recommended investments and action in international systemic and governance-related areas like tax, trade, and debt; as well as international action to strengthen international public data.<sup>7</sup> The financing of GPGs can draw on a range of actors including governments, multilateral organisations and the private sector. For example, government expenditure on renewable or low carbon energy domestically can both drive national energy costs down and contribute to climate change mitigation. The private sector can also play a role in providing GPGs, for example through public–private partnerships such as the Global Alliance for Vaccines and Immunisation (Gavi), which uses the financial and technological strengths of the private sector to accelerate equitable uptake and coverage of vaccines.

GPGs can be provided in the form of international resource flows (as well as domestic flows); these can include official development assistance (ODA), other official flows, private giving, South–South cooperation and peacekeeping. The future financing of GPGs overlaps considerably with the financing of a number of related SDGs, which aim to align efforts across a wide landscape of people, enterprises, partnerships and governments to meet the goals set out. This discussion paper focuses on the role of ODA in providing GPGs. ODA is well positioned to contribute as a funding source for certain GPGs. It is administered with a main objective to promote the economic development and welfare of developing countries, enabling it to be



targeted towards funding specific GPGs, while its concessional element can help finance the gap for countries with limited resources to do so.<sup>8</sup> ODA is also a resource flow for which there are existing targets, norms and standards in the international policy space for development, and it is the measure generally used to assess 'aid' provided in relation to international targets.

However, while it is increasingly recognised that financing for GPGs is essential for sustainable development,<sup>9,10,11</sup> many developing countries still require significant external support to finance poverty eradication within their borders. At the same time, many international actors are seeing fiscal and political pressures impacting their aid budgets. Concessional development cooperation finance is increasingly recognised as a scarce and precious resource with competing demands. Attention is therefore turning to questioning the role development cooperation should play in providing GPGs,<sup>1,2</sup> and how it should balance addressing national and global needs. Decision-making around this balance should be based on the impact such investments have on reaching and benefitting those most in need and the availability (or lack) of other resources to finance such investments.

There is no single agreed definition of GPGs from donors in the international policy space<sup>1,12</sup> and no agreed method of measuring either how much public finance is spent on GPGs or how to track the impact of this spending. Some areas of spending on GPGs are particularly difficult to track in detail, for example, climate finance. Without this information, we cannot answer basic questions that would enable the international community to begin to assess financing needs and gaps for GPGs. Nor can we develop a strategic approach to providing financing for GPGs that takes note of existing national challenges and needs on the one hand, and the comparative advantage of different sources of finance on the other.

This discussion paper takes a first step: outlining an analytical approach to assessing ODA for GPGs. The rationale for this approach is that ODA is one of the key forms of international cooperation available for targeting at sustainable development, and is usually directed to developing countries that are disproportionately affected by some of these global challenges, but have a corresponding lack of domestic capacity to publicly finance a response.<sup>13</sup> Our approach aims to build on previous analysis by developing a working methodology to estimate ODA to GPGs to promote discussion among key stakeholders and provide evidence for debate, taking note of existing literature and work in this space.<sup>14</sup>

The analysis profiles ODA's role in providing GPGs and highlights the difficulties of measurement. Better defining of GPG investments and better understanding of how ODA currently supports these investments are essential first tasks in informing the debate around appropriate uses of ODA. Using a generally accepted definition of GPGs, this approach results in an estimate of total ODA to GPGs of US\$12.9 billion in 2014, making up 8% of total ODA. This paper concludes that the majority of flows contributing to GPGs are disbursed relating to the environment (including climate change mitigation) and a further significant proportion is targeted at health (including communicable disease prevention) and research.

It also provides breakdowns on aid for GPGs by recipient, sector, donor and channel of delivery and notes challenges in estimating financing for certain themes, such as climate change mitigation. Finally, the paper provides some initial recommendations for improving reporting financing for GPGs that could aid future analysis, and suggests future areas of research.

## **Defining global public goods**

### **The concept of GPGs used in this paper**

The definition of GPGs used for our analysis of ODA broadly follows the economic definition and pre-existing literature's framework. Our analysis aims therefore to capture activities that are non-rival (consumption by one person does not diminish consumption by another), non-excludable (no one can be excluded from their benefits) and that cover more than one group of countries.<sup>15</sup> In the strictest sense, some GPGs included under our definition may not be universally considered GPGs or be considered as impure GPGs: ie non-rival but excludable, (eg



medical research impacting affected populations only) or non-excludable but rival (eg preserving fish stocks). This approach sees rivalry and excludability as relative and not absolute concepts and a broader framework allows for other frequently referenced examples of GPGs to be included in the definition, without requiring all inclusions to precisely meet all terms of the pure economic definition.<sup>16</sup> This paper draws from specific examples of GPGs provided in the literature that can be applied to the composition of ODA, and uses this basis to analyse ODA flows. (For further details on our methodological approach and analytical framework, see Appendices 1 and 2).

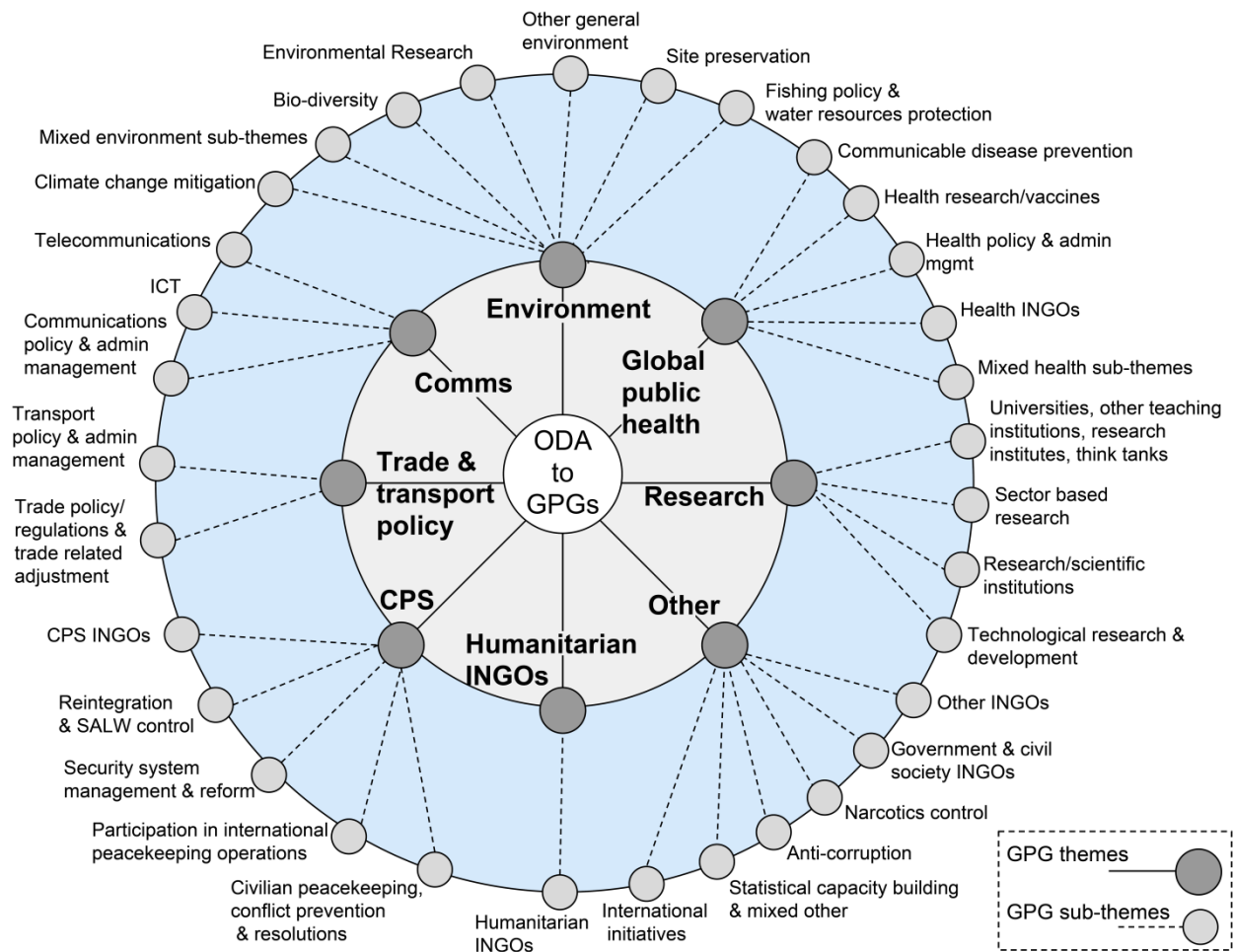
The provision and management of GPGs is not assigned to a specific institution: multiple actors have a role and multilateral institutions and treaties are well placed to do this. The United Nations Framework Convention on Climate Change (UNFCCC), for example, is the international treaty that coordinates the global effort to address climate change. Parties to the UNFCCC reached an agreement at the Paris climate conference in December 2015 that sets out a global action plan to limit global warming, and is due to enter into force in 2020. Another example includes the World Bank, which has been exploring how it could incorporate a GPGs agenda in its programme of work.<sup>5</sup> Further, the Global Fund to Fight AIDS, Tuberculosis and Malaria plays a significant role in financing the health-related GPG communicable disease control. The analytical framework used in this paper therefore aims to also feature ODA disbursements from or channelled through specific multilateral institutions that would be considered to have a role in providing GPGs.<sup>17</sup>

## **GPG themes**

This paper identifies eight broad themes under which ODA can be directed to GPGs. Each theme contains one or more sub-themes; and these sub-themes are *why* any particular activity is included as a GPG (for example, communicable disease prevention is categorised as a sub-theme and is the basis for selection as a GPG, and sits under the global public health theme alongside other global public health sub-themes such as health research). The 'Other' category groups together other GPG themes that do not relate to a theme, such as some international non-governmental organisations (INGOs), narcotics control and international transparency and impact evaluation initiatives. A separate 'Research' theme captures research that is not affiliated to any other GPG theme.

Despite a focus on ODA activities that can benefit several recipient countries across different regions, this GPG definition also follows the logic that certain flows may constitute a GPG even if they are directed specifically to a country-level recipient; this is because certain activities in one country can have an impact in others. For example, disbursements marked as climate change mitigation – national-level reductions in greenhouse gas emissions – can contribute to stabilising greenhouse gas concentrations globally. Likewise, regional-level expenditure relating to communicable disease prevention and participating in international peacekeeping operations is considered to reduce cross-border and cross-regional conflict/infectious disease spreading and to act as a GPG. Therefore our results also describe ODA that is classed as being spent on GPGs in terms of the eventual outcome, but which can be tracked to a specific country recipient in terms of the immediate activity.

Figure 1: 8 GPG themes and sub-themes



Notes: 'Other' is a group of several GPG sub-themes, specifically narcotics control, international transparency and impact evaluation initiatives, and international non-governmental organisations (INGOs) including those relating to human rights. Research GPGs can be included in multiple themes including global public health and environment; research not attributable to another category is under the Research theme. Some disbursements may overlap between themes; these are presented as mixed area GPGs. CPS: conflict, peace and security. 'Other general environment' includes environmental policy & education, biosphere protection and desertification

Expenditure that may be framed as a regional public good only, such as regional development bank programmes and research-specific activities disbursed to the regional level, are only included here if they also meet a GPG definitional criteria (see Appendix 1). For example, a research activity disbursed to the regional level that relates to communicable disease prevention or holds a principal policy objective towards climate change mitigation.

### The eight GPG themes:

1. **Global public health** is crucial to development progress and has characteristics that meet the GPGs definition. In particular, preventing the emergence and spread of communicable diseases (such as polio, tuberculosis and Ebola) is widely recognised as a global public good.<sup>15,16,19</sup> This is particularly relevant in an interconnected global model where communicable diseases with capability to adapt to changing environments and medical technological advancements can spread rapidly across borders and regions via widely used modern global transportation systems such as aviation and trade routes. Further health GPGs can include health policy, systems and knowledge and technologies.<sup>18</sup>
2. **Research** resulting in the generation and dissemination of knowledge is frequently recognised as an important GPG<sup>15,19,20</sup> and can act as a cross-cutting issue across different

types of GPGs. For example, research and development can interlink between vaccine development and communicable disease prevention.

3. Preserving the **environment** is a frequently referenced GPG. As such, protecting the global commons (resource domains or areas that lie outside the political reach of any one nation state) falls under a GPG definition in our analysis. One key example is climate change mitigation – efforts to reduce or prevent greenhouse gas emissions.<sup>21,22</sup> Other environmental areas, such as internationally focused fishing policy and water resources protection, are included here as GPGs because – in the case of these examples – water scarcity and fisheries collapse may transcend national borders.<sup>23</sup> While national-level biodiversity and site preservation can be globally beneficial, Sagasti and Bezanson<sup>24</sup> also observe that losing biodiversity increases the likelihood that further environmental disturbance will result in a significant reduction in the goods and services that the Earth’s ecosystems can provide. Therefore we have aimed to include activities relating to biodiversity, including at the national level.
4. **Conflict, peace and security**: Conflicts can escalate across borders, feed future conflicts, disrupt trade and international relationships, draw in actors and cost lives around the world.<sup>25,26</sup> Conflict can be strongly interlinked to the arms trade, and irresponsible or illicit transfers of conventional weapons (including small arms) can destabilise cross-border security; the majority of weapons used in recent conflicts have crossed international borders.<sup>27,28</sup> Outcomes contributing to global peace and security are therefore captured as GPGs under this definition; these include limiting international and cross-border conflicts through weapons control, conflict resolution and peacebuilding.<sup>29</sup>
5. GPGs and globalisation are intrinsically linked.<sup>30</sup> One aspect of globalisation – stimulating **international trade** through encouraging a free and open trade system via trade expansion in developing countries and/or facilitating trade agreements and multilateral trade negotiations that are global in scope – can act as a GPG. This happens through enhancing competitiveness, providing more choice on products and qualities for consumers, diversifying risk for companies and broadly speaking, stimulating economic growth. However, certain aspects of trade agreements may not be considered universal goods; for instance, trade agreements can result in loss of employment, give license for privatisation of public services, and give transnational corporations greater power – for example through the ability to sue governments for loss of profits. Overall, trade agreements can result in both winners and losers across the global landscape. Despite these noted drawbacks, this paper aims to incorporate ODA designed to enhance or relate to international trade policy and regulations into its measure of GPGs.

Similarly, another aspect to globalisation; internationally focused **transport sector policy and planning**, which can include policy advice, global road safety and aviation security, can act as a GPG. Yet in the case of transport, the ‘good’ may not be accessible to every member of the population due to its rivalrous element, because transport use can be limited through charging. However, certain activities in this area may benefit transport systems and users within multiple countries, and as such this area has been captured as a GPG.

6. **Communications**: Improving globally interconnected communications and information and communications technology (ICT) systems can facilitate universal communication and interaction and the spread of human knowledge and as such is considered a GPG for this analysis.
7. The following three areas are grouped into the ‘other’ GPG theme.
  - (i) **International transparency and impact evaluation initiatives** aimed at improving open and accountable resource management such as the International Aid Transparency Initiative (IATI) and the Extractive Industries Transparency Initiative.
  - (ii) **Narcotics control** can be listed as an important GPG because drug consumption and its consequences are a major problem for some countries that are not necessarily producers.<sup>19</sup>

(iii) **INGOs** can undertake activities that aim to impact broad global areas, such as supporting government and civil society to improve human rights, women's equality, and media and free flow of information. INGOs are also active on global initiatives in health, for example, reproductive healthcare, family planning and sexually transmitted disease (STD) control. Funding INGOs whose work aims to have global reach and funding INGO activities designed to benefit multiple regions are both considered to contribute to global welfare improvements and as such are included as GPGs here.<sup>31</sup>

8. One important **INGO area** is activities reported under the **humanitarian** sector. This can include funding for the International Committee of the Red Cross, part of the International Red Cross and Red Crescent Movement, which works to ensure humanitarian protection and assistance for victims of war and other situations of violence and can include aid to refugees and displaced persons. While humanitarian funding released on country-specific projects may not act as a GPG because it is targeted to a specific area and population, it can be argued that the funding of an international humanitarian organisation may act as a GPG, because this funding may be targeted towards emergencies around the world. As such, funding the work of humanitarian INGOs is considered a GPG in our analysis.

## Estimation methodology

This paper measures ODA to GPGs using Organisation for Economic Co-operation and Development (OECD) Creditor Reporting System (CRS) data. The OECD Development Assistance Committee (DAC) defines ODA as (concessional) flows provided by official agencies administered with the main objective of promoting the economic development and welfare of developing countries. This paper covers disbursements from DAC, multilateral and non-DAC donors that report to the OECD CRS. A key reason why the OECD CRS was selected is for the high coverage ratio of DAC members' aid – at nearly 100% since 2007.<sup>32,33</sup>

Our methodology defines GPGs within the existing structure of the OECD CRS. The approach defines each listed GPG sub-theme according to the variables provided in the DAC databases (either alone or in combination), such as purpose codes, policy markers, channel names and donors, to create a CRS-framed definition for each sub-theme. To give some examples, the climate change mitigation sub-theme includes disbursements marked as 'principal' under the OECD DAC Rio marker on climate change mitigation; and the communicable disease prevention sub-theme is predominantly framed by disbursements under purpose codes: malaria control, tuberculosis control and infectious disease control. Appendices 1 and 2 give more details. Action was taken to avoid the risk of double counting between overlapping activities; Appendix 3 explains the overlap categorisation system.

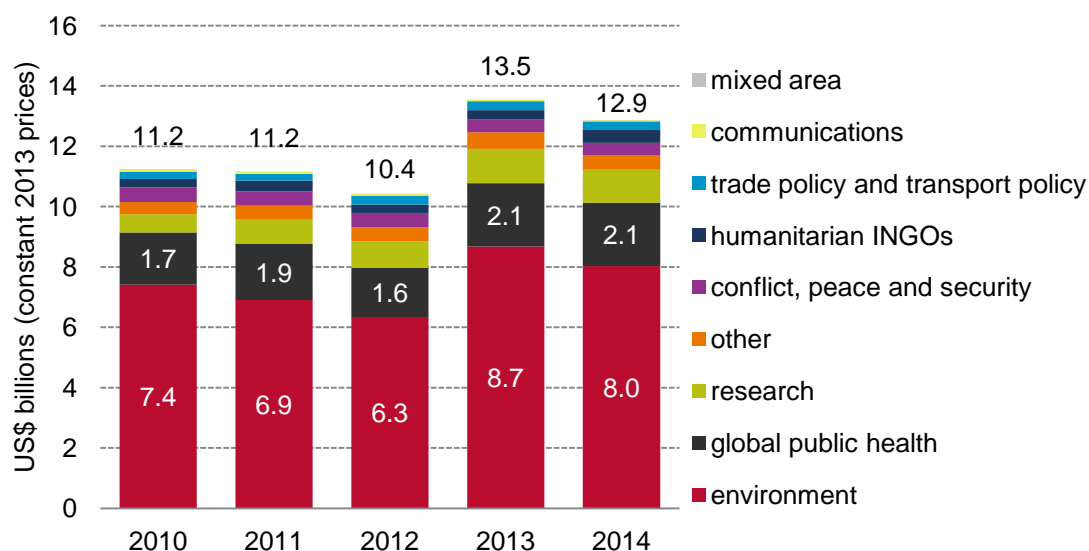
As mentioned, certain sub-themes aim to include only activities that benefit multiple geographical recipients (ignoring those aimed at individual country recipients). We only include disbursements recorded under the CRS recipient name: 'bilateral unspecified' (used if an activity benefits several regions), when estimating GPGs to these sub-themes.<sup>34</sup> Similarly, sub-themes that include flows to regional recipients as part of their GPG definition include activities recorded under CRS regional recipients (ODA that benefits several recipient countries in the region).

## Data analysis breakdown<sup>35</sup>

### How much ODA for GPGs is there, and what is it funding?

**ODA to GPGs stood at US\$12.9 billion in 2014.** This represents a 5% decrease from peak levels in 2013 (US\$13.5 billion), but an increase on 2010 levels. Environment and global public health were respectively the first and second largest themes each year between 2010 and 2014. GPGs to the environment theme peaked at US\$8.7 billion in 2013. Overall, in 2014, GPGs made up 8% of total ODA.

Figure 2: ODA to GPGs by broad theme, 2010–2014

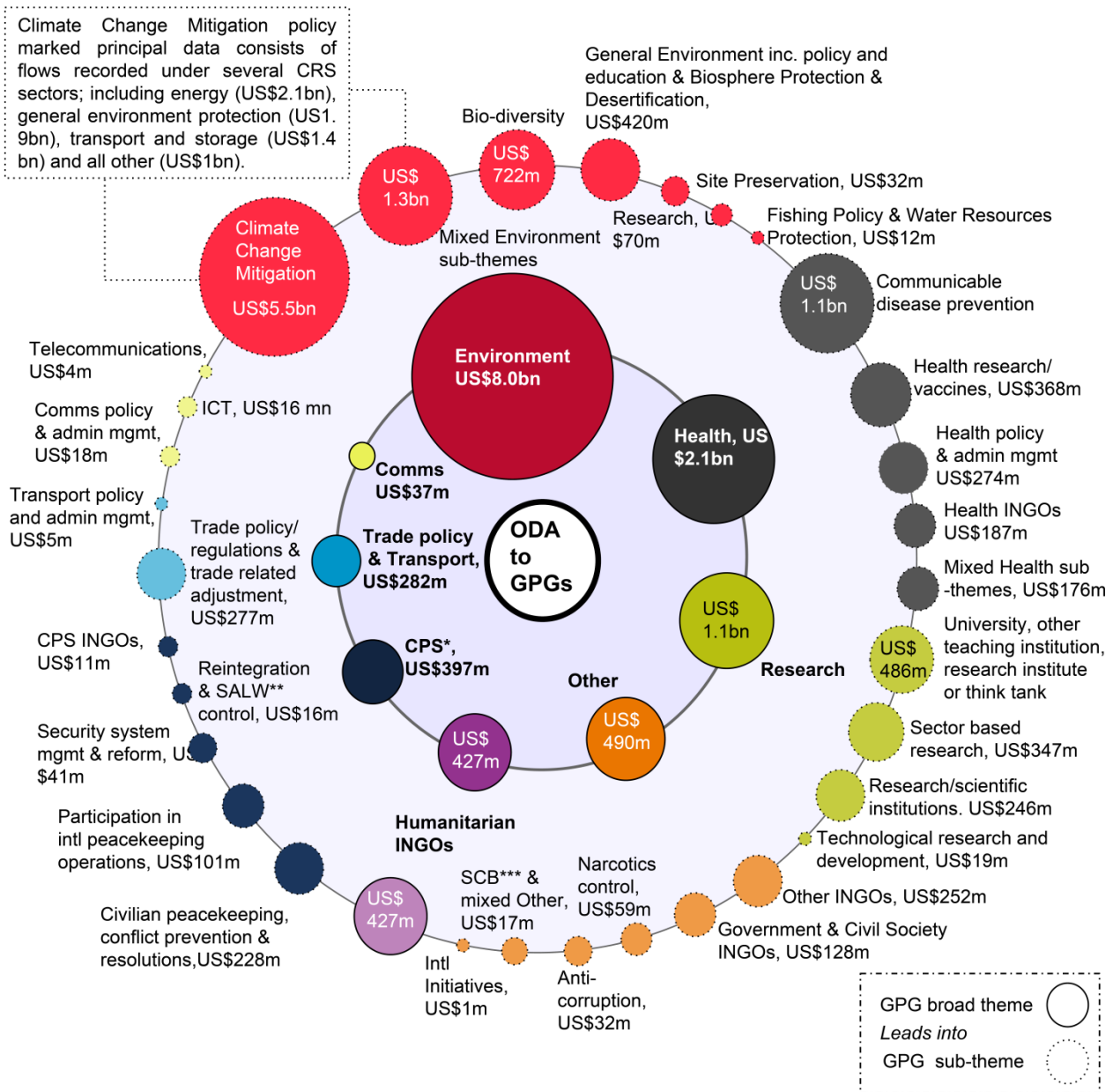


Source: OECD CRS, data downloaded 08-01-2016

**Disbursements to the environment theme made up 62% (US\$8.0 billion) of total ODA to GPGs in 2014.** A significant proportion of this (over 80%) comprises activities marked to have a principal policy focus on climate change mitigation (around four-fifths is recorded under the climate change mitigation sub-theme and the remaining under the environment mixed sub-theme). The GPG definition used here associates climate change mitigation with being an environment-related GPG. However, a significant number of activities policy marked for climate change mitigation and therefore included in the environment GPG theme are recorded under CRS sectors outside of the general environment protection sector, such as energy generation and supply (US\$2.1 billion) and transport and storage (US\$1.4 billion). ODA captured in the bio-diversity sub-theme stood at US\$722 million in 2014.

However, these numbers may be larger in reality than the data shows. The value shown for climate change mitigation disbursements is likely an underestimate; several multilateral donors do not report to the OECD's Rio marker on climate change mitigation, while other multilaterals such as Global Environment Facility report only their commitments to the marker, but not their disbursements. This issue is explored in more detail in the section 'Discussion of methodological limitations'.

Figure 3: GPGs by broad theme and sub-theme, 2014



Source: OECD CRS, data downloaded 08-01-2016

Note: Circles to approximate scale. \*CPS: Conflict, Peace and Security. \*\*SALW: Small arms & light weapons. \*\*\*SCB: Statistical capacity building. Mixed GPGs between broad themes (not including INGOs and research) stood at US\$11.3 million and are not shown in this chart. Mixed sub-themes (eg mixed environment) contain returns that overlap into more than one sub-theme in a broad theme. Research results that do not correspond with a particular broad theme are shown under Research: total research-marked GPG disbursements stood at US\$2 billion. INGOs' ODA is embedded across multiple themes and superseded by any other GPG theme in the case of an overlap. For more information on total disbursements going through INGOs see Figure 8.

**Global public health** was the second largest broad theme with disbursements recorded at US\$2.1 billion. Communicable disease prevention was the largest health sub-theme at US\$1.1 billion; this mostly captured regional and bilateral unspecified recipient disbursements to purpose codes: infectious disease control, tuberculosis control and malaria control. Disbursements to the sub-theme health research/vaccines stood at US\$368 million (other health research is embedded in the mixed and communicable disease prevention health sub-theme).<sup>36</sup>



**Research** (not including research embedded in other GPG themes such as global public health and environment) was the third largest 2014 GPG sub-theme at US\$1.1 billion – just under half of which was included in the form of ODA channelled through universities, other teaching institutions, research institutions and think tanks.

**The conflict, peace and security theme**, which aims to capture ODA contributing to global peace and security, came to US\$397 million.<sup>37</sup> This theme covers flows of bilateral unspecified and regional participation in international peacekeeping operations. The enforcement aspects of peacekeeping are not reportable as ODA; however, ODA can include activities in UN peacekeeping operations such as disarmament, training of administrators and advice on economic stabilisation. The theme also includes bilateral unspecified security system management and reform; prevention/reduction in the proliferation of small arms and light weapons; civilian peace-building; and conflict prevention and resolution.

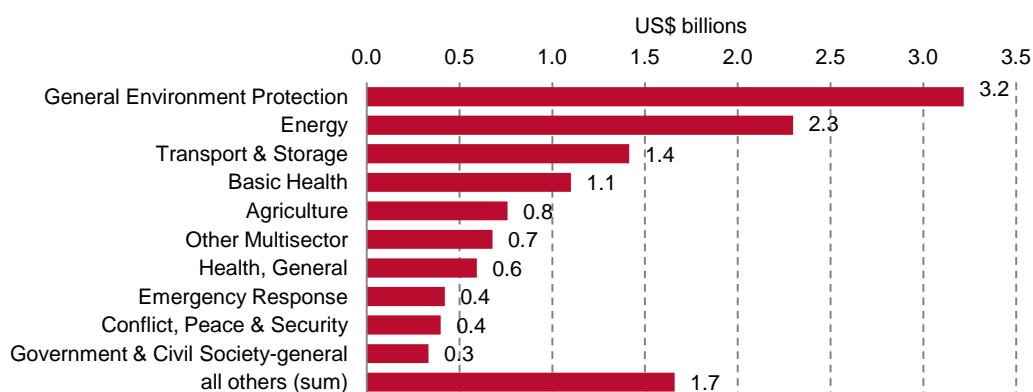
**Trade and transport** includes bilateral unspecified activities reported under the OECD sector trade policy regulations and trade-related adjustment, which includes purpose codes such as multilateral trade negotiations and trade facilitation. It also comprises bilateral unspecified activities recorded under the purpose code transport policy and administration management. Overall, GPG activities in this theme came to an estimated US\$282 million.

### Aid for GPGs by sector

**General environment protection, energy and transport and storage** were the largest three OECD sectors (as defined by the OECD) for GPG disbursements in 2014. This outcome is shaped by the sector distribution of activities marked principal under the Rio marker on climate change mitigation. US\$2.1 billion of ODA was disbursed to projects in the energy generation and supply sector that were marked as having climate change mitigation as a principal objective. A further US\$1.4 billion was disbursed to similarly-marked projects in the transport and storage sector (which can include flows on the construction of low carbon urban public transport systems and freight logistics). Thus projects relating to climate change mitigation represented the majority of GPG ODA disbursed to both these sectors.<sup>38</sup>

A notable mitigation activity recorded under the energy sector is a US\$285 million loan from Germany to Brazil towards a wind farm programme (energy sector), while under the transport and storage sector there was a US\$250 million loan from Japan to Thailand towards construction of mass transit system in Bangkok and a US\$441 million loan from Japan to India towards the construction of Delhi metro. Both of the latter activities aim to mitigate climate change through reducing greenhouse gas emission by decreasing the level of road transport use by increasing the availability of urban public transport systems and can also be viewed as examples of disbursements in a specific country acting as a GPG (see next section for further analysis of this concept).

Figure 4: GPGs by CRS sector, 2014



Source: OECD CRS, data downloaded 08-01-2016



The basic health, health general and population policies/programmes and reproductive health sectors received US\$1.1 billion, US\$593 million and US\$305 million respectively – totalling US\$2 billion. Government and civil society was the 10th largest sector at US\$333 million, with activities split between research and INGOs.

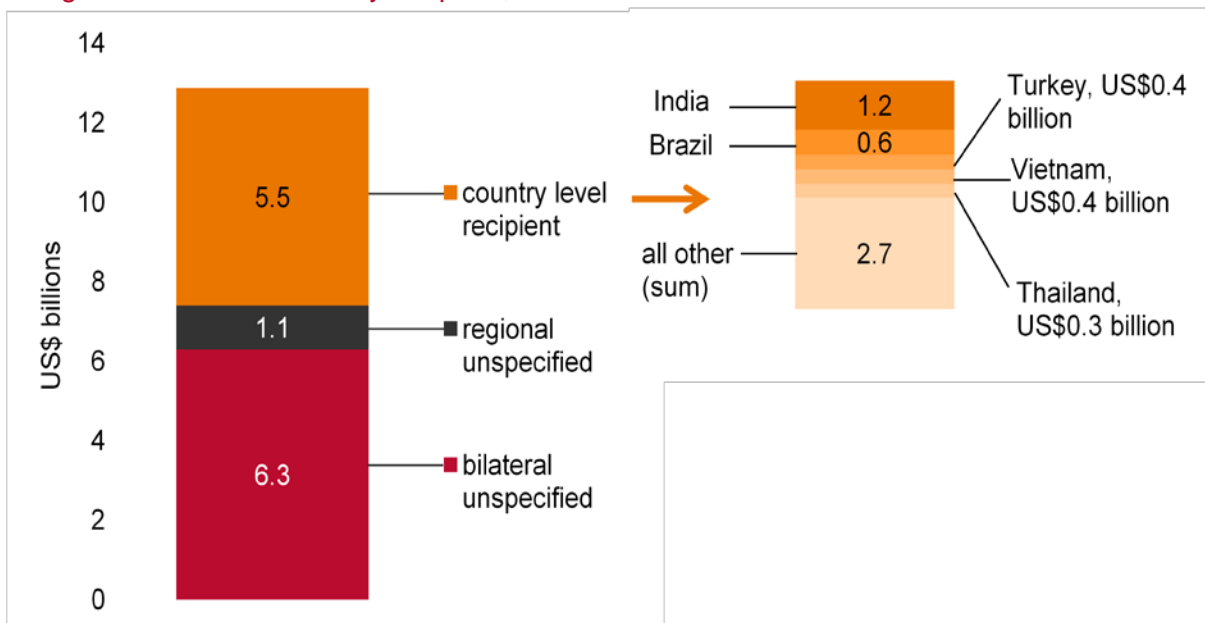
### Who receives aid for GPGs

The concept of a recipient of a GPG is paradoxical. However, as explored within the section ‘Defining global public goods’, certain investments undertaken at the national level can have cross-regional or global impact and, as such, meet the properties of being a GPG. This section explores this concept through analysis of the recipients of ODA to GPGs.

Figure 5 shows a breakdown of GPGs ODA by the tier of recipient of ODA flows reported in the OECD CRS. These include *bilateral unspecified*, which captures activities that benefit several regions, *regional unspecified*, which captures activities that benefit several countries within a region and *country-level recipient*, which capture activities directed to specific countries. See Appendix 2 for details, and how this is mapped to each GPG.

**Over 40% of ODA to GPGs was disbursed to bilateral unspecified recipients and country-level recipients.**

Figure 5: ODA to GPGs by recipient, 2014



Source: OECD CRS, data downloaded 08-01-2016

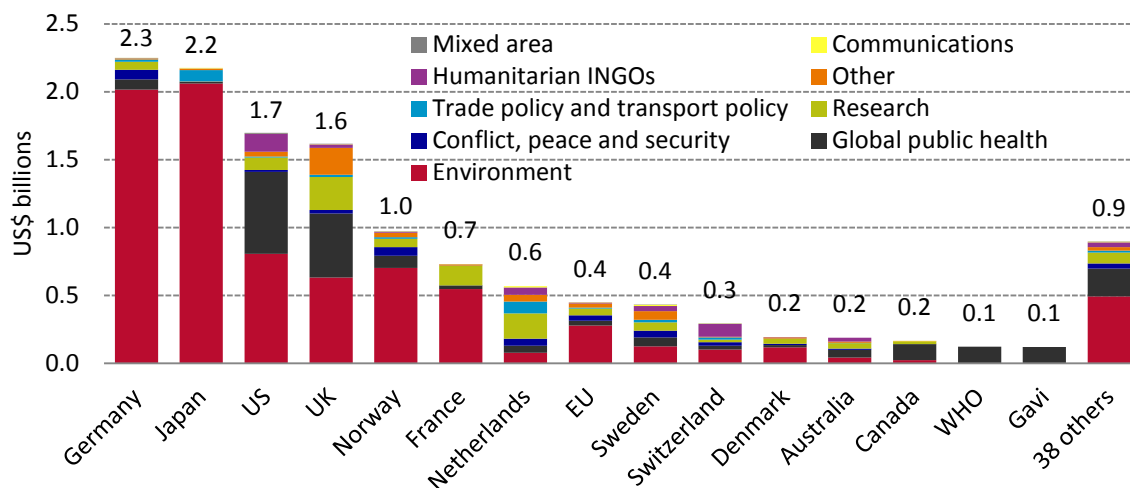
Country-level recipients received US\$5.5 billion, with the five countries receiving the most being India (US\$1.2 billion), Brazil (US\$624 million), Turkey (US\$353 million), Viet Nam (US\$352 million) and Thailand (US\$337 million). These are all classified as middle income countries (two lower and three upper). This outcome is driven by the framing of national-level climate change mitigation disbursements as GPGs; these recipients are all significant recipients of climate change mitigation ODA.

Bilateral ODA to unspecified recipients amounted to US\$6.3 billion. Regional recipients received US\$1.1 billion. The three regions that received the most were South of Sahara regional (US\$287 million), Africa regional (US\$204 million) and America regional (US\$201 million). Themes for which regional recipients received ODA are predominantly related to climate change mitigation (including regional-level renewable-energy-related activities), communicable disease prevention and biodiversity.

## Who provides aid for GPGs?

**The two donors that provided the most each disbursed over US\$2 billion.** Germany provided US\$2.3 billion while Japan disbursed US\$2.2 billion; both donors reported a significant level of ODA to climate change mitigation activities. The US provided the third largest amount at US\$1.7 billion, with just under half of disbursements to the environment GPG theme and just over a third to the global public health GPG theme. Of multilateral donors, the EU gave the most at US\$447 million. Other multilateral bodies that provided significant amounts of GPG ODA include the WHO (US\$124 million), Gavi (US\$120 million) and Climate Investment Funds (US\$103 million). In total, disbursements were recorded from 53 donors.

Figure 6: GPGs by donor, 2014

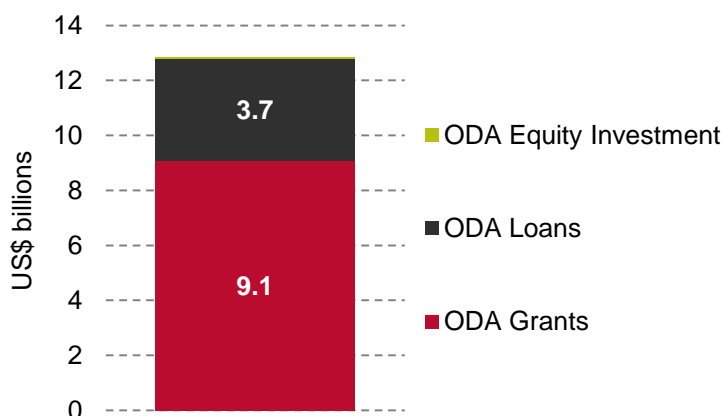


Source: OECD CRS, data downloaded 08-01-2016

## Modalities for ODA to GPGs:

**70% of ODA to GPGs was disbursed in the form of ODA grants.** ODA loans made up 29%, while equity investments stood at 1%. Significant donors of ODA loans to GPGs are Japan (US\$1.9 billion), Germany (US\$1.2 billion) and France (US\$465 million). Most of this falls under the climate change mitigation theme and is channelled through national governments.

Figure 7: GPGs by ODA flow type, 2014



Source: OECD CRS, data downloaded 08-01-2016

### How is aid for GPGs delivered?

This section provides a breakdown of the channel through which aid to GPG was delivered, defined as the first implementing partner and entity holding responsibility for the funds, and serves to identify the recipients of multilateral aid and the implementing agencies of bilateral aid.

Public sector institutions were the largest channel of delivery for GPGs in 2014, of which US\$2.9 billion was disbursed to recipient governments (the vast majority being climate change mitigation-marked ODA); a further US\$1.9 billion went to unspecified public sector institutions. Donor governments stood at US\$735 million – this generally accounts for activities whereby a donor government’s own public sector agencies such as departments, operational components and research centres are the first implementing partner of a disbursement. Examples include the US Department of Health and Human Services channelling money through the Centers for Disease Control and Prevention and the Netherlands Ministry of Foreign Affairs channelling money through the Ministry of Security and Justice.

Multilateral organisations were the second largest 2014 channel of delivery at US\$2.8 billion, of which US\$1 billion was channelled through the World Bank and US\$1.2 billion through the UN (large UN agencies include the WHO at US\$357 million, United Nations Development Programme at US\$260 million, and United Nations Environment Programme at US\$128 million). A total of US\$1.4 billion was channelled through INGOs while donor country-based NGOs channelled US\$580 million.

Total GPG disbursements channelled through INGOs stood at US\$1.4 billion in 2014 (see Figure 8); these flows are shown throughout multiple GPG themes in Figure 3 (see Appendix 3 for categorisation details). Disbursements to humanitarian INGOs at the bilateral unspecified level) stood at US\$427 million in 2014. This can include core funding to INGOs such as the International Committee of the Red Cross and supporting humanitarian assistance to refugees, although by no means all INGO refugee assistance. Funding to government and civil society INGOs, shown in Other, refers to activities recorded under the CRS government and civil society sector, which includes the purpose codes human rights, women’s equality organisations and institutions, media and free flow information, and democratic participation and civil society. This stood at US\$128 million. Narcotics control, also shown in ‘Other’ stood at US\$59 million.

Figure 8: GPGs by channel of delivery, 2014



Source: OECD CRS, data downloaded 08-01-2016

### In focus: Research as a GPG

ODA flows contributing to global research are defined here through research-relevant CRS purpose codes (including agricultural research, medical research, research/scientific institutions and technological research and development) and research relevant channels of delivery (such as disbursements channelled through universities, colleges or other teaching institutions, research institutes or think tanks); see Appendices 1 and 2 for more details.

Overall, GPG disbursements marked under this research definition stood at US\$2 billion in 2014, 15% of the estimated GPG total. Research disbursements are captured under different GPG themes. The definition of research used in this sub-section is also applicable to activities originally included for meeting separate GPG criteria that are research related. Overall, US\$863

million of research is embedded in GPGs themes outside the research theme; this includes US\$516 million under global public health (making up a quarter of total GPGs ODA to this theme), and US\$315 million under environment (4% of total environment GPGs).

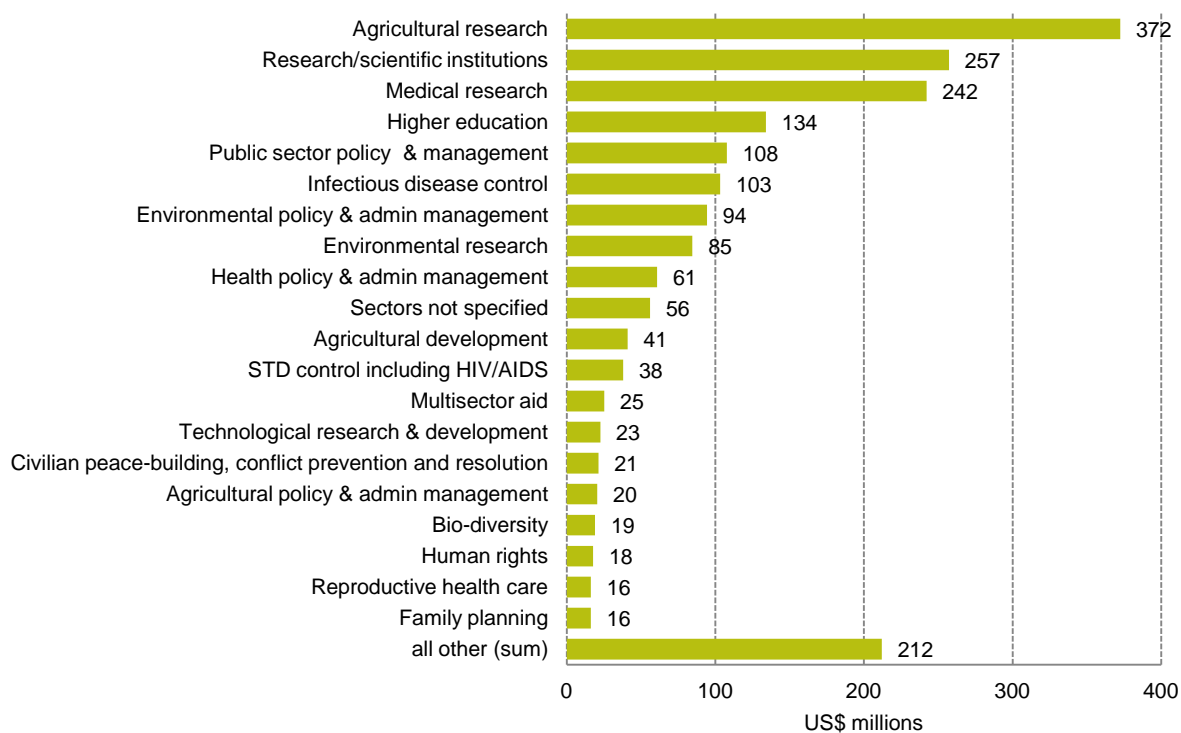
Table 1: Research GPGs

GPG theme	Research GPG expenditure US\$ millions	Research disbursements as % total ODA under GPG theme
Environment	315.4	3.9%
Global public health	516.5	24.6%
Research	1098.5	100%
Conflict, peace and security	23.9	6.0%
Trade policy and transport policy	2.3	0.8%
Other	2.3	0.5%
Communications	2.3	6.1%
Mixed	0.4	3.2%

Source: OECD CRS, data downloaded 08-01-2016

Figure 9 shows research marked GPGs by CRS purpose code, capturing a breakdown which includes both purpose codes specifically selected as GPG sub-themes and other purpose codes, and provides a sector based unbundling of aggregated research GPG themes. Agricultural research, research/scientific institutions, and medical research were the largest three GPG research-marked purpose codes. Overall, research-marked GPG disbursements were recorded under a significant number of purpose codes, 109 in total.

Figure 9: Research-marked GPGs by CRS purpose code



Source: OECD CRS, data downloaded 08-01-2016

## Discussion of methodological limitations

### Estimating ODA for climate change mitigation is challenging

As stated earlier, the value shown for climate change mitigation disbursements is likely to be an underestimate. Several multilateral donors do not report to the OECD Rio marker on climate change mitigation, while other multilaterals such as Global Environment Facility report only their commitments, but not their disbursements.

There are recognised challenges with tracking, measuring and monitoring climate-related finance. Overall, the estimation technique used in this paper relies on the quality of donor reporting to the OECD CRS. There are particular limitations in measuring ODA disbursements to climate change mitigation. Capturing activities marked *principal* under the Rio marker can be considered a best estimate as opposed to an exact amount. Policy marker reporting is subjective and there is no internationally agreed methodology for measuring an exact share of climate change mitigation ODA by activity (nor that of other policy markers). Furthermore, donor reporting to the marker is limited because a number of multilateral organisations do not report to the marker or report commitments only. Finally, adding in significant (or secondary) policy climate change mitigation-marked activities was not done within this definition. This was due to an aim to only capture projects with principal (primary) policy objectives towards climate change mitigation, and not those with an incomplete focus on mitigation. However, excluding significant marked climate change mitigation activities may also contribute to an underestimation of climate change mitigation ODA in this paper.

The issue of reporting of commitments only is worth highlighting. Key institutions like the International Development Association (IDA; US\$2.2 billion), Climate Investment Funds (US\$1 billion) and Global Environment Facility (US\$180 million) provided significant levels of climate change mitigation commitments in 2014. In total, concessional commitments from multilateral donors not reporting/showing mitigation disbursements to the CRS in 2014 using the Rio marker stood at US\$3.8 billion. This means the status of this large amount of funding cannot be ascertained, at least without further in-depth and painstaking analysis.

In 2015, a number of development finance institutions including the World Bank agreed to a common set of principles that each will use to track climate change mitigation finance (the principles consist of a set of common definitions and guidelines for climate mitigation finance tracking),<sup>39</sup> which may go some way to increasing comparability and quality of data. However, improving reporting and implementing the principles will be the responsibility of individual institutions involved. Independent stakeholder review will therefore be required to assess progress in implementing the principles.

The new principles also only require ex-ante reporting at commitment stage, meaning that further improvements may still need to be made to ensure that disbursements of finance are also reported. While climate change mitigation commitments are significantly larger overall than are disbursements (US\$16.4 billion compared with US\$6.5 billion),<sup>40</sup> aside from additional reporting estimates available for commitments, they can also be higher due to 'front loading' for countries with large multi-year loans<sup>41</sup>, where differences and fluctuations may be seen between yearly commitment and disbursement data.

Reporting of climate finance disbursements must improve to complement the data available on commitments.<sup>42</sup> This would provide a clearer picture of what is being spent at global level, providing evidence for global policy-making and policy dialogue, and can also support a more effective and accountable financing process. For example, in the case of funding not being spent, reporting on disbursements would allow stakeholders to assess the status of the funds and identify which institution is currently responsible for them.

## The World Bank's role in providing GPGs may be even more significant than the data tells us

The World Bank organisations that report development assistance are the IDA, the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC). IDA provides grants and concessional lending, reported as ODA, while IBRD and IFC provide less concessional financing reported as other official flows.

Over a decade ago, the World Bank became interested in GPGs and made supplying them a strategic theme.<sup>20</sup> One key area of World Bank activities is climate change mitigation, and estimates on such commitments are provided by and reported in the DAC bilateral and multilateral climate-related development finance dataset.<sup>43</sup> The OECD data shows that in 2014, IDA's concessional climate change mitigation commitments stood at US\$2.2 billion, more than double levels in 2013 (US\$1 billion). It also shows significant levels of non-concessional climate change mitigation financing from the IBRD (US\$3.5 billion in 2014) and IFC (US\$1.8 billion in 2014).

However, the analysis undertaken on disbursements in this paper captures a relatively low level of GPG disbursements from the World Bank, US\$32 million from the IDA and US\$49 million in other official flows from the IBRD. A further reason this analysis captures a relatively low level of GPG disbursements from the World Bank is because much of the World Bank resources and decision-making fall under country-level programmes<sup>44</sup> (all IDA ODA disbursements reported to the CRS were disbursed to the recipient or regional level in 2014). The methodology used in this analysis for framing many GPG sub-themes by capturing disbursements going to the projects without a specified recipient country therefore reduces the likelihood of capturing World Bank disbursements.

Furthermore, this analysis shows US\$1 billion in GPGs ODA is channelled *through* (on top of ODA which is provided *by*) the World Bank. Just less than three-quarters of this ODA went to the environment theme, while 14% went to the research theme (including US\$101 million on agricultural research) and 9% to the global public health theme. Overall, the Bank's role in financing or delivering global public goods may be much more significant than is reflected in this paper's findings.

## Lack of an accepted definition of GPGs hampers conclusive estimates and brings specific challenges

There is no fixed definition of what constitutes a GPG, which means that estimates in this analysis will differ from previous findings by other researchers. The following potential GPG areas have *not* been included under the definition used in this paper and are discussed below, with implications and recommendations for addressing these:

### Global financial systems

Global financial-related activities aiming to strengthen financial systems and reduce the risk of global financial crisis, such as the IMF's surveillance of global financial markets, are often attributed as GPGs. However, IMF Concessional Trust Funds, which reports to the CRS as a donor, and CRS activities channelled through the IMF, were not specifically captured in this methodology; this was due to difficulties in estimating the extent to which these activities (particularly those reported at the country level) would act as GPGs. One relevant purpose code to financial markets and systems, 'financial policy and administrative management', received US\$64 million in bilateral unspecified disbursements in 2014. Further research may be needed to ascertain whether some contributions from donors – funding to global institutions or relevant research, for example – may in fact be relevant to this GPG area. Additionally the section on systemic issues in the Addis Ababa Action Agenda identifies some critical action areas in global economic governance and financial regulation where support may need to be tracked. The report of the Inter-Agency Task Force on Financing for Development reviewed available data sources for tracking international cooperation to systemic issues but was not able to identify an



ODA-related indicator.<sup>45</sup> As the international aid architecture is reshaped in the wake of the SDGs, for example as new purpose codes are available in the DAC CRS to track commitments to SDG-relevant targets, it may be worth opening up dialogue about ODA for this area so it can be tracked.

### **STD control including HIV/AIDS**

This paper includes some expenditure relating to this area by capturing HIV/AIDS-related spending under bilateral and regional unspecified disbursements from the Global Fund, a degree of HIV/AIDS-related health research (captured under the medical research purpose code and channeled through teaching institutions, research institutes or think tanks), and ODA relating to HIV/AIDS channeled through INGOs. However, it does not include all disbursements under the purpose code 'STD control including HIV/AIDS'. One reason is that, apart from research, the public goods problems associated with HIV/AIDS can be considered to be regional and not global.<sup>46</sup> Furthermore, a significant level of AIDS-related spending over the last 15 years has been directed to countries for treatment and prevention within their own borders.<sup>15</sup> There are also difficulties in distinguishing between HIV treatment and prevention programmes as they are often grouped in the same activity description. Treatment may not necessarily hold the property of being non-rival and non-excludable – therapy may be made available for one person or nation and people can be prevented from receiving treatment. However, HIV treatment can act as a prevention method as it can reduce risk of onwards transmission, although it may hold limitations in terms of its preventional ability.<sup>47</sup> Overall, US\$1.6 billion was disbursed to the 'STD control including HIV/AIDS' purpose code at the bilateral unspecified and regional levels in 2014, 10% of which has been included.

### **Administrative costs of donors**

Some previous analysis of official financing for GPGs has included certain administrative costs as GPGs. For example, Birdsall and Diofasi (2015) include an estimate of administrative expenditure of UNICEF as a GPG on the basis that it contributes to the monitoring of children's welfare worldwide.<sup>15</sup> For consistency, this paper does not take that approach, as the argument may be applicable to multiple donors contributing to both GPGs and to welfare across multiple countries and there are difficulties in estimating the administrative costs behind GPG activities for all these donors.

### **National/regional to global-level impacts**

Estimates of the global impact of ODA spent in a specific country or region are subjective. Factoring in implications of a flow's spatial dimension can prove challenging when estimating whether it is a GPG. Certain flows to the national level may hold cross-border/cross-regional benefits. For example, disbursements under the tuberculosis control and infectious disease control purpose codes directed to the county level may be considered GPGs in the case that national-level infectious disease control prevents a multi-regional spreading of disease. Similarly, research undertaken in a single country setting could be applicable to other countries. In these cases, such disbursements would not be captured under many of the definitions used in this paper. On the other hand, prevention and control of certain communicable diseases, such as malaria may be considered not to act as a GPG, because disease control may only benefit endemic areas – as such malaria control could be considered to be a regional public good only.<sup>18</sup> A rigorous framework and shared taxonomy for defining GPGs and reporting to this effect would help overcome this issue. Detailed reporting of all activity descriptions may enable subjective decisions to be made on a case-by-case basis on classifying projects as GPGs.

### **Policy markers**

The DAC marker system facilitates monitoring of activities in relation to their realisation of OECD development policy objectives. As discussed, policy marker reporting is descriptive rather than quantitative, and the classification of development activities within member states is not standardised. The marking system can assign one of three categorisations to an activity: principal (policy objectives that are fundamental in the design of an activity), significant (those

that are important but not a principal reason for undertaking the activity) and not targeted (not targeted to the policy objective). When using this system in the methodology for framing data around certain GPGs (such as climate change mitigation and biodiversity), this paper has focused on capturing principal policy marked activities only, due to an aim to capture projects holding a greater level of focus on the GPG theme and has therefore not included activities marked significant. This may lead to an underestimate in the levels stated for certain GPG sub-themes (eg omitting the GPG relevant component of a significant marked project).<sup>48</sup>

### Other reporting quality issues

Several discrete data quality challenges have been identified. For example, donor reporting that does not split projects by sector would lead to any GPG-related flows embedded in non-GPG-defined sectors being left out of our analysis. Certain disbursements with no recipient country specified may not have a global reach; rather the donor may simply have omitted to report the name of the recipient country. Finally, including disbursements channelled through universities, colleges, other teaching institutions, research institutes or think tanks (excluding scholarships, imputed student costs and administrative costs of donors) as 'research' may also pick up some non-research activities that may not be relevant to report as global public goods.

## Conclusions and questions for future research

This paper has provided an initial set of estimates for ODA that was directed to GPGs in 2014, has shed light on where ODA is invested in GPGs and identified a number of potential areas for further discussion and research. Future global dialogue and action to improve the quality of data on ODA for some key GPG themes, such as climate change mitigation disbursements or ODA directed to strengthening global financial systems, may be useful to ensure a clearer picture and improve accountability of these funds. The reporting of ODA spent by and through the World Bank on GPGs may also be worthy of greater attention to ensure that all the relevant spending can be included in future analysis.

Additionally, as with all analysis of ODA, the data in this paper is only as good as that which is reported. Donors should strive for consistency, granularity and timeliness in their reporting of ODA and ensure that all relevant details, such as recipient country and project descriptions, are reported rigorously. Future dialogue around potential ODA directed to GPGs may be useful in light of the changes to international aid architecture and specifically could be linked to future updating of SDG-relevant purpose codes in the CRS at the OECD DAC. This may resolve the difficulties with accurately estimating ODA reported to policy markers.

It is also important to look at further questions around the role of ODA in providing GPGs; such as whether there other GPG areas that could particularly benefit from ODA. Furthermore, questions around the wider financing of GPGs are also important. What is the comparative advantage of ODA over other resources in making GPG investments? What is the role of other types of financing in GPG investments and are there other resources available to invest in these areas? To what extent should ODA, compared with other resources, be active in these areas?

Finally, promoting further dialogue around not only what constitutes a GPG and agreeing a definition – to reach agreement between stakeholders on what should and should not be included in any potential measure – would be a useful entry point to a broader and more critical discussion on how the effectiveness and impact of ODA for GPGs can be assessed. ODA effectiveness is generally considered as relating to internationally agreed principles for effective development cooperation as follows:

- **Ownership of development priorities by developing counties:** Countries should define the development model that they want to implement.
- **A focus on results:** Having a sustainable impact should be the driving force behind investments and efforts in development policy-making

- **Partnerships for development:** Development depends on the participation of all actors, and recognises the diversity and complementarity of their functions.
- **Transparency and shared responsibility:** Development cooperation must be transparent and accountable to all citizens.<sup>49</sup>

In the new 2030 Agenda era, it may be timely to promote discussion on the applicability of these existing effectiveness principles to ODA spent on GPGs. For example, our analysis hints at the need for discussion of how the **country ownership** principle can be best applied when considering ODA spent to impact on global challenges. This also relates to the **focus on results** principle: further analysis and dialogue is needed to promote a better understanding of how the results of ODA for GPGs can be tracked and their impact on the poorest and most vulnerable people. This is particularly so in themes such as conflict peace and security, communicable disease prevention and research, where the initial activity may have a long-term and widespread impact outside the country or area where the output is initially funded. Further, **transparency** and mutual accountability of ODA for GPGs is an issue already explored in this paper, particularly in regard to climate mitigation finance, that could benefit from global attention and further research. Finally, the **partnerships** principle is relevant to ODA for GPGs in ensuring the right actors and flows can be measured. For example, climate-related activities funded by ODA are often delivered in 'blended finance' arrangements with private actors; the scale of these activities are likely to be much larger than our analysis captures. ODA-like contributions from other stakeholders, such as philanthropic foundations or providers of South–South cooperation, are also presumably significant, but are not all captured in our analysis (only other government donors outside of the DAC reporting to the CRS).

---

## Contact

We welcome your feedback, comments and questions on this analysis, and on any of the points raised in this discussion paper.

Duncan Knox, Analyst

T: +44 (0) 1179 272 505 | E: [duncan.knox@devinit.org](mailto:duncan.knox@devinit.org)

[www.devinit.org](http://www.devinit.org)

Cordelia Lonsdale, Policy & Engagement Advisor

T: +44 (0) 1179 272 505 | E: [cordelia.lonsdale@devinit.org](mailto:cordelia.lonsdale@devinit.org)

[www.devinit.org](http://www.devinit.org)

# Appendices

## Appendix 1: Decision-making

A key aim of this paper was to use OECD CRS data to develop an estimate of total ODA to GPGs. The approach taken was to use the information classified in certain CRS fields; namely, purpose codes, channels of delivery, policy makers and donor names to map against the descriptions of reported GPG examples in the current discourse, which could be applicable to ODA. Information available on CRS reporting was used to judge the extent to which any particular CRS criteria could be a suitable fit in measuring flows to each specific GPG theme.

**Purpose code names and descriptions** were one of several means used in the mapping of GPG types to CRS data, for example malaria control, tuberculosis control and infectious disease control were associated with communicable disease prevention, with the former two identifiable as communicable diseases. Similarly a number of CRS purpose codes were considered to map directly onto GPG sub-themes (with flows to the purpose code considered as the sub-theme): eg narcotics control and participating in international peacekeeping operations.

Flows recorded under purpose codes relating to sector specific research such as agricultural research, energy research and medical research were included under research headings, as was technological research and development and research/scientific intuitions. Activities recorded under the CRS channels of delivery 'university, college or other teaching institution, research institute or think tank' and 'UN University' were also included as research. However, the aid types 'scholarships/training in donor country and imputed student costs' and 'sector administrative costs of donors', where possible, were excluded from results as there was an aim to capture research activities specifically.

The **DAC policy marker system**, which describes ODA measures in relation to their realisation of OECD development policy objectives, was used in classifying GPGs ODA. For example, activities marked as holding a principal objective towards climate change mitigation, as captured by the Rio marker on climate change mitigation.

**CRS channel names** were used to identify organisations whose work was considered to act as a GPG. Decisions on which channels to include were made by researching specific organisations. For example, flows channelled through the UN Framework Convention on Climate Change were included under the climate change mitigation sub-theme due to its objective 'to stabilise greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system'.

Similar to channel of delivery, **CRS field donor name** was used to select certain donors reporting to the CRS whose work was considered to act as a GPG. For example, the Global Fund was included because it is a 'partnership organisation designed to accelerate the end of AIDS, tuberculosis and malaria as epidemics'.

Detailed CRS project records allowed the possibility of a closer scrutiny of results. A review of activity long descriptions, short descriptions and project titles from returned results under each GPG sub-theme was used to aid the decision-making process and to gain a stronger understanding of the specific activities included. For example, Climate Investment Funds, a multilateral donor reporting to the CRS, has programmes relating to both climate change adaptation and mitigation. With the aim of including mitigation activities only in this paper, activity descriptions from Climate Investment Funds were reviewed and used in the decision to include only CRS sectors forestry and energy generation and supply from this donor. This limits the inclusion of adaptation activities that were described in activities recorded in other CRS sectors.

The treatment of the data made sure not to double count results through marking classifications by CRS criteria in separate columns of the CRS dataset that records aid flows by individual activities (eg a flow could be twice marked as related to communicable disease prevention if

disbursed from the Global Fund to the malaria control purpose code). For an overview on how overlaps between separate GPG themes and sub-themes were treated, see Appendix 3.

Furthermore, the decision on whether to apply a filter to the recipient level (see Appendix 2) was based on the individual nature of each GPG sub-theme and how it was expected to operate when receiving funding at different recipient levels. A filter on the recipient level was applied to themes that were considered to ‘lose’ their GPG status if targeted to the individual country or regional level. For example, research aimed for use in a specific country or region was considered not to act as a GPG. In the case of sub-themes, communicable disease prevention and participation in international peacekeeping operations flows to regional-level and bilateral unspecified-level recipients were included following the logic that regional-level interventions were considered to reduce the likelihood of multi-regional transmission or conflict spillover. As it is less clear if flows disbursed to the national level in these cases would ultimately end up acting as GPGs, they were not included in this paper.

## Appendix 2: GPG definition methodology by theme and sub-theme mapping onto CRS

This table details the estimation methodology used on OECD CRS fields. Further details on CRS purpose codes including clarifications/additional notes on coverage can be found in the OECD’s [list of CRS purpose codes](#).<sup>50</sup> The DAC reporting directives also provides further information on various CRS fields.

The third column: ‘Recipient-level GPG inclusion decision’ shows which reported recipient level is accepted for inclusion as a GPG for each CRS field name.

- *Bilateral unspecified* (BU) captures activities that benefit several regions
- *Regional unspecified* (RU) captures activities that benefit several countries within a region
- *All* (All) refers to all recipients (both country level and unspecified)

CRS Field	CRS name	Recipient-level GPG inclusion decision	GPG theme
Purpose names	Health policy and administrative management	BU only	Global public health
	Medical research	BU only	Global public health
	Multilateral trade negotiations	BU only	Trade and transport policy
	Regional trade agreements (RTAs)	BU only	Trade and transport policy
	Trade education/training	BU only	Trade and transport policy
	Trade facilitation	BU only	Trade and transport policy
	Trade policy and admin. management	BU only	Trade and transport policy
	Trade-related adjustment	BU only	Trade and transport policy
	Transport policy and administration management	BU only	Trade and transport policy
	Civilian peace-building, conflict prevention and resolution	BU only	CPS*
	Reintegration and SALW control**	BU only	CPS
	Security system management and reform	BU only	CPS
	Anti-corruption organisations and institutions	BU only	CPS
	Biosphere protection	BU only	Environment
	Environmental policy and admin. management	BU only	Environment
	Environmental education/training	BU only	Environment
	Environmental research	BU only	Environment
Forestry research	BU only	Environment/	

			Research
	Fishing policy and administration management	BU only	Environment
	Fishery research	BU only	Environment
	Statistical capacity building	BU only	Other
	Educational research	BU only	Research
	Technological research and development	BU only	Research
	Agricultural research	BU only	Environment/ Research
	Research/scientific institutions	BU only	Research
	Information and communication technology (ICT)	BU only	Communications
	Communications policy and administration management	BU only	Communications
	Telecommunications	BU only	Communications
	Water resources protection	BU only	Environment
	Energy research	BU only	Environment/ Research
	Malaria control	BU & RU only	Global public health
	Infectious disease control	BU & RU only	Global public health
	Tuberculosis control	BU & RU only	Global public health
	Participation in international peacekeeping operations	BU & RU only	CPS*
	Narcotics control	All	Other
	Biodiversity	All	Environment
	Site preservation	All	Environment
<b>Policy markers</b>	Climate change mitigation <sup>+</sup>	All	Environment
	Biodiversity <sup>+</sup>	All	Environment
	Desertification <sup>+</sup>	BU only	Environment
<b>Channel name and channel reported name</b>	United Nations Framework Convention on Climate Change	All	Environment
	Global Climate Partnership Fund	All	Environment
	Extractive Industries Transparency Initiative	All	Other
	International Centre for Diarrhoeal Disease Research, Bangladesh	All	Global public health
	International Initiative for Impact Evaluation	All	Other
	International Aid Transparency Initiative	All	Other
	United Nations Environment Programme	BU only	Environment
	CGIAR Fund	BU only	Research
	International AIDS Vaccine Initiative	BU only	Global public health
	International NGOs	BU only	Distributed across themes <sup>++</sup>
University, college or other teaching institution, research institute or think tank and UN University (including Endowment Fund) <sup>†</sup>	BU only	Research	
<b>Donors</b>	Gavi	BU only	Global public health
	Global Environment Facility (GEF)	BU only	Environment
	Global Fund	BU & RU only	Environment
	Climate Investment Funds (CIF) <sup>††</sup>	All	Environment
	Global Green Growth Institute (GGGI)	All	Environment

\*CPS: conflict, peace and security

\*\*SALW: small arms and light weapons

<sup>†</sup>Includes activities with principal policy objective towards the marker (and in support of an action programme for the 'desertification' marker only). The 'biodiversity' marker only includes activities under the general environmental protection sector.

<sup>††</sup>Humanitarian sector activities under humanitarian INGOs theme.



<sup>†</sup>Excludes aid type E01 and E02 (to remove scholarships) and sector: administrative costs of donors

<sup>††</sup>Disbursements to sectors energy and forestry are only included because of the potential of climate change adaptation expenditures being recorded under other sectors.

### Appendix 3: Overlap categorisations

Under the circumstance of an overlap, a categorisation system was developed to define each activity. Activities overlapping into more than one theme are presented as mixed; however, two particular areas: ‘research’ and ‘bilateral unspecified disbursements channelled through INGOs’ are treated separately.

Research, where relevant, is embedded throughout multiple GPG broad themes. It is categorised by relevant sectors and markers, for example, research activities holding environment policy marker marked principal objective or overlapping with another environment sub-theme are included in the environment theme. Research that is not specified to a particular broad area is captured under the research theme. Disbursements channelled through university, college or other teaching institution, research institute or think tank and UN University are predominated by any other GPG broad theme/sub-theme (with the exception of INGOs); these activities are also marked as research related (see Table 1 and Figure 8).

Bilateral unspecified disbursements channelled through INGOs are predominated by any other GPG category, while any activities under this theme holding no overlap with other GPG themes are shown in the ‘Other’ theme, except humanitarian INGOs, which has its own broad theme.

### Appendix 4: Results by GPG broad theme and sub-theme

Broad themes are shown in bold.

<b>ODA to GPGs by theme and sub-theme, 2014</b>	<b>US\$ millions</b>
<b>Environment</b>	<b>8,025.7</b>
Climate change mitigation	5,454.8
Mixed environment	1,314.2
Biodiversity	722.4
General environment including policy and education	377.1
Research	70.3
Biosphere protection	33.5
Site preservation	32.5
Fishing policy and water resources protection	12.0
Desertification	9.0
<b>Global public health</b>	<b>2,099.2</b>
Communicable disease prevention	1,094.6
Health research/vaccines	367.6
Health Policy and administration management	273.7
Health INGOs	186.9
Mixed health	176.5
<b>Research*</b>	<b>1,098.5</b>
Bilateral unspecified channelled through university, college or other teaching institution, research institute or think tank and UN University	486.3
Agricultural research	334.7
Research/scientific institutions	245.9
Technological research and development	19.4
Educational research	6.9
Forestry Research	3.1
Energy research	2.1
<b>Other</b>	<b>489.6</b>
Other INGOs	252.2
Government and civil society INGOs	128.3
Narcotics control	58.6
Anti-corruption	32.0
Statistical capacity building	15.9
Mixed other	1.4



International Initiatives	1.2
<b>Humanitarian INGOs</b>	<b>426.8</b>
Humanitarian INGOs	426.8
<b>Conflict, peace and security</b>	<b>397.5</b>
Civilian peace-building, conflict prevention and resolution	227.6
Participation in international peacekeeping operations	101.3
Security system management and reform	41.4
Reintegration and SALW control	15.7
CP&S INGOs	11.5
<b>Trade policy and transport policy</b>	<b>282.2</b>
Trade policy and regulations and trade-related adjustment	276.9
Transport policy and administration management	5.3
<b>Communications</b>	<b>36.8</b>
Communications policy and administration management	17.6
ICT	15.6
Telecommunications	3.6
Communications INGOs	0.1
<b>Mixed</b>	<b>11.3</b>
Mixed	11.3

\* Research is embedded in other GPG themes when it comes under other relevant broad theme sectors/is marked with relevant policy markers/is combined with sub-areas from broad GPG themes (total research marked ODA to GPGs stood at US\$2 billion in 2014).

## Acknowledgements and notes

The author of this paper would like to thank those who provided content, editorial and methodological input, and guidance for this discussion paper. In particular: Cordelia Lonsdale at Development Initiatives for key inputs into the introductory and conclusion sections; Jenny Claydon for editorial input; Rob Tew, Daniel Coppard and Martin Horwood at Development Initiatives for content and methodological review and guidance; Annabelle Burgett and Rodrigo Salvado at the Bill & Melinda Gates Foundation for content review and guidance.

---

1. Sachs JD and Schmidt-Traud G (2015) Financing Sustainable Development: Implementing the SDGs through Effective Investment Strategies and Partnerships. Sustainable Development Solutions Network. Working Paper. Revised version June 2015. Available at: <http://unsdsn.org/wp-content/uploads/2015/04/150619-SDSN-Financing-Sustainable-Development-Paper-FINAL-02.pdf>
2. Kaul I, Davies R, Glasser R, Gerber M and Etter L (2015) Policy Debate: Financing the SDGs: Global vs Local Public Goods, International Development Policy, *Revue internationale de politique de développement*. Available at: <https://poldev.revues.org/2068#quotation>
3. The theory of public goods emerged in the 1950s, with economist Paul A Samuelson laying the foundations for a concept that at the time was largely seen as applicable to the provision of public goods at the state level. The up-scaling of this concept to global challenges started in the late 1960s, and continued into the 1990s; Kaul, Grunberg and Stern's 1999 book 'Global Public Goods International Cooperation in the 21st century' built on the literature through exploring the concept of GPGs in describing and analysing global challenges and the existing policy options available to enhance GPG provision. GPGs have been steadily recognised in the international policy space as an essential element of international action.<sup>16,51</sup>
4. Tognotti E (2013) Lessons from the history of quarantine from Plague to Influenza A. *Centres for Disease Control and Prevention. Emerging Infectious Diseases*, 19:2. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3559034/>
5. Jenks B (2015) From an MDG World to an SDG/GPG World: Why the United Nations should embrace the concept of Global Public Goods. Development dialogue paper. Dag Hammarskjöld Foundation. Available at: [www.daghammarskjold.se/publication/mdg-sdg-gpg/](http://www.daghammarskjold.se/publication/mdg-sdg-gpg/)
6. UN (2016) One Humanity: Shared Responsibility, Report of the UN Secretary General for the World Humanitarian Summit. Available at: <http://sgreport.worldhumanitariansummit.org/>
7. UN (2015) Addis Ababa Action Agenda of the Third International Conference on Financing for Development. Available at: [www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/69/313](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/69/313)
8. By definition ODA also excludes a number of activities that could be defined as GPGs: for example, the enforcement aspects of peacekeeping, which can serve to prevent international conflict; and activities combating terrorism and research not directly and primarily relevant to the problems of developing countries.
9. Birdsall N and Leo B (2011) Find me the money: financing climate and other global public goods. Working paper 248. Centre for Global Development.
10. Mansell M (2015) Addressing Financing in a 2015 Climate Agreement. Centre for Climate and Energy Solutions. Available at: [www.c2es.org/docUploads/finance-brief-06-2015.pdf](http://www.c2es.org/docUploads/finance-brief-06-2015.pdf)
11. Schäferhoff, M, Fewer, S, Kraus, J et al (2015) How much donor financing for health is channelled to global versus country-specific aid functions? *Lancet*. Available at: [http://dx.doi.org/10.1016/S0140-6736\(15\)61161-8](http://dx.doi.org/10.1016/S0140-6736(15)61161-8).
12. For example, see notes on GPG definitions as outlined by major contributors in the international debate, available at: <http://keionline.org/node/1790>
13. Currently, ODA is reserved exclusively for the purpose of supporting the economic development and welfare of developing countries, though it can be channelled through regional or multilateral institutions. See 'Is it ODA?' OECD DAC, [www.oecd.org/dac/stats/34086975.pdf](http://www.oecd.org/dac/stats/34086975.pdf)
14. Previous analysis of official financing to GPGs includes Birdsall and Leo (2011) and Birdsall and Diofasi (2015), which estimate GPG financing from select GPG Funds and facilities, with the latter also providing contributions to select UN agencies with estimated share of GPGs.<sup>9,15</sup> Reisen, Soto and

---

Weithöner (2004) use the OECD's CRS to define ODA to GPGs through GPG-relevant DAC purpose codes.<sup>19</sup> Development Initiatives' ITEP 2015 report frames GPGs around ODA reporting designed to benefit all developing countries that funds research bodies, NGOs, special purpose funds or projects earmarked to environmental, climate change or global trade issues.<sup>31</sup> Overall, estimates on ODA to GPGs in any given year can range between 2% and 15% (although the aid flow type and donors in focus will vary by estimate).<sup>19,31,52</sup>

15. Birdsall N and Diofasi A (2015) Global Public Goods for Development: How Much and What For. Centre for Global Development. Available at: [www.cgdev.org/sites/default/files/CGD-Note-Birdsall-Diofasi-Global-Public-Goods-How-Much.pdf](http://www.cgdev.org/sites/default/files/CGD-Note-Birdsall-Diofasi-Global-Public-Goods-How-Much.pdf)

16. Kaul I Grunberg I and Stern MA (1999) Global Public Goods International Cooperation in the 21st Century. UNDP: New York. Available at: <http://web.undp.org/globalpublicgoods/TheBook/globalpublicgoods.pdf>

17. Multilateral expenditure captured in this paper refers to ODA disbursement data reported by multilateral organisations listed as donors in the OECD CRS. This reporting can capture the entire core budget of the multilateral organisation. The core budget can include funding from the private sector and capital acquired on capital markets, as well as funding from official sources. Gavi and the Global Fund both report as donors to the OECD CRS, and in these cases reporting can capture funding originally from private sources such as the Bill and Melinda Gates Foundation.

18. Woodward, D and Smith, W. Global Public Goods and Health: concepts and issues. World Health Organisation. Available at: [http://www.who.int/trade/distance\\_learning/gpgh/gpgh1/en/index.html](http://www.who.int/trade/distance_learning/gpgh/gpgh1/en/index.html)

19. Reisen, Soto and Weithöner (2004) Financing Global and Regional Public Goods through ODA: Analysis and Evidence from the Creditor Reporting System. Working paper No.232, OECD Development Centre. Available at: [www.oecd.org/development/pgd/24482500.pdf](http://www.oecd.org/development/pgd/24482500.pdf)

20. Evans JW and Davies R (eds) (2014) Too global to fail: the World Bank at the intersection of national and global public policy in 2025. Directions in development; environment and sustainable development. World Bank Group, Washington, DC. Available at: <http://documents.worldbank.org/curated/en/2014/11/20459029/too-global-fail-world-bank-intersection-national-global-public-policy-2025>

21 Willem Te, Velde D, Hewitt A and Morrissey O (2006) Thematic Issues 'Aid financing of International Public Goods'. UN Industrial Development Organisation: Vienna. Available at: [www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4219.pdf](http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4219.pdf)

22. Climate change mitigation, referring to dealing with the causes of climate change by reducing emissions, is included here as a GPG. This is because emission reduction in a nation can contribute to stabilising greenhouse gas emissions globally. Climate change adaptation, referring to dealing with the impact of climate change, is not a targeted GPG in this paper because the benefits of adaptation-specific expenditure are not necessarily considered to accrue beyond the recipient country or region.

23. See Center for Global Development blog by Lawrence MacDonald: World Bank Study Explores options on Global Public Goods: [www.cgdev.org/blog/world-bank-study-explores-options-global-public-goods](http://www.cgdev.org/blog/world-bank-study-explores-options-global-public-goods)

24. Sagasti F and Bezanson K (2001) Financing and Providing Global Public Goods: Expectations and Prospects, Ministry for Foreign Affairs Sweden. Available at: [www.gci.org.uk/Documents/SMFA\\_.pdf](http://www.gci.org.uk/Documents/SMFA_.pdf)

25. Young W, Stebbins D, Frederick BA, Al-Shahery O (2014). Spillover from the Conflict in Syria. An Assessment of the Factors that Aid and Impede the Spread of Violence. Rand National Defense Research Institute. Available at: [www.rand.org/content/dam/rand/pubs/research\\_reports/RR600/RR609/RAND\\_RR609.pdf](http://www.rand.org/content/dam/rand/pubs/research_reports/RR600/RR609/RAND_RR609.pdf)

26. Ianchovichina E (2014) The Economic Impact of the Syrian War and the Spread of ISIS: Who Loses & How much. World Bank. Voices and Views: Middle East and North Africa. Available at: <http://blogs.worldbank.org/arabvoices/economic-impact-syrian-war-and-spread-isis-who-loses-how-much>

27 Stohl R (2002) The Tangled Web of Illicit Arms Trafficking. Centre for American Progress. Available at: [www.americanprogress.org/wp-content/uploads/kf/TerrorinShadows-Stohl.pdf](http://www.americanprogress.org/wp-content/uploads/kf/TerrorinShadows-Stohl.pdf)

---

28. International Committee of the Red Cross (2006) Unregulated arms availability, small arms & light weapons and the UN process. Background paper. ICRC Resource Centre. Available at: [www.icrc.org/eng/resources/documents/misc/small-arms-paper-250506.htm#a5](http://www.icrc.org/eng/resources/documents/misc/small-arms-paper-250506.htm#a5)

29. The OECD DAC convened a High Level Meeting from 18–19 February 2016 in Paris, where governments agreed to new rules that allow for a wider set of peace and security activities to be counted as ODA. See guest blog by Sarah Dalrymple on Felix Dodds.net for further details <http://blog.felixdodds.net/2016/03/guest-blog-bysarah-dalrymple-new-aid.html>

30. UNDP (2002) Providing Global Public Goods: Managing Globalization: 25 Questions & Answers. UNDP/ODS: New York. Available at: <http://web.undp.org/globalpublicgoods/globalization/pdfs/questions.pdf>

31. Investments to End Poverty (2015) Development Initiatives. Available at: [http://devinit.org/wp-content/uploads/2015/09/Investments-to-End-Poverty-Report-2015\\_online.pdf](http://devinit.org/wp-content/uploads/2015/09/Investments-to-End-Poverty-Report-2015_online.pdf)

32. See technical guide to terms and data in the DAC CRS Aid Activities database coverage ratios section, available at: [www.oecd.org/dac/stats/crsguide.htm](http://www.oecd.org/dac/stats/crsguide.htm)

33. International Aid Transparency Initiative, which provides current and forward looking data on aid, and has over 400 organisations publishing, was not used in this analysis, this was due to the aim of capturing an estimate on total ODA to GPGs; the OECD CRS was considered the best option for this exercise because not all DAC donors hold full coverage on activity reporting to IATI.

34. The bilateral unspecified recipient category includes donor administrative costs and refugees in donor country; however, these flows are mostly captured under CRS sectors administrative costs of donors and refugees in donor countries, which are not included under this GPG definition.

35. All US\$ values shown are in constant 2013 prices unless otherwise stated. Flows are in the form of ODA disbursements, as defined by the OECD DAC. Disbursements record the actual international transfer of financial resources, or of goods or services valued at the cost to the donor.

36. Health sub-areas can be strongly interlinked: health research-coded activities can contain research on communicable disease prevention, while communicable disease prevention-coded activities can be based around research and development. A word search using the word ‘research’ on project-long descriptions captures an additional US\$79 million in disbursements not included under research-marked health area activities. While disbursements relating to vaccines can be embedded across the different health sub-areas, vaccine research and development and vaccine coverage may be included under several health purpose codes including infectious disease control and health research.

37. CPS totals shown are an extract of activities reported under DAC sector conflict, peace and security (CPS) considered as GPGs in this paper’s methodology – as such the totals shown differ to ODA spending on CPS totals shown in Development Initiatives paper ‘Investments in peace and security’ which includes all disbursements recorded under the DAC CPS sector. Available at: <http://devinit.org/wp-content/uploads/2016/02/Investments-in-peace-and-security.pdf>

38. The CRS Energy Generation and Supply sector contains 17 purpose names, examples include: energy policy and administrative management, power generation/renewable sources, power plants (including oil-fired and hydro electric) energy (including solar and geothermal) and biomass, power (including wind and ocean) and energy research.

39. [www.worldbank.org/content/dam/Worldbank/document/Climate/MDB%20IDFC%20Mitigation%20Finance%20Tracking%20Common%20Principles%20-%20V2%2015062015.pdf](http://www.worldbank.org/content/dam/Worldbank/document/Climate/MDB%20IDFC%20Mitigation%20Finance%20Tracking%20Common%20Principles%20-%20V2%2015062015.pdf)

40. The stated US\$16.4 billion in climate change mitigation commitments is comprised of principal 2014 climate change mitigation commitments reported under the Rio marker in the CRS and concessional mitigation commitment values from MDBs not reporting commitments to the Rio marker in the 2014 CRS.

41. OECD (2015) Climate finance in 2013–14 and the US\$100 billion goal, a report by the OECD in collaboration with Climate Policy Initiative. Available at: [www.oecd.org/environment/cc/OECD-CPI-Climate-Finance-Report.htm](http://www.oecd.org/environment/cc/OECD-CPI-Climate-Finance-Report.htm)

42 See The Practical Challenges of Monitoring Climate Finance, a briefing by the Climate Funds Update. The Climate Funds Update database is also a useful resource. The CFU has tracked climate finance mitigation disbursements, but this data is not available for 2014, hence is not included in this analysis.

- 
43. The DAC bilateral and multilateral climate-related development finance dataset refers to the project-level data for every climate-related development finance project in 2013–2014, see: [www.oecd.org/dac/stats/climate-change.htm](http://www.oecd.org/dac/stats/climate-change.htm)
44. [www.cgdev.org/blog/world-bank-study-explores-options-global-public-goods](http://www.cgdev.org/blog/world-bank-study-explores-options-global-public-goods)
45. Inter-Agency Task Force on Financing for Development (2016) Monitoring commitments and actions. Inaugural report. United Nations. Available at: [www.un.org/esa/ffd/wp-content/uploads/2016/03/Report\\_IATF-2016-full.pdf](http://www.un.org/esa/ffd/wp-content/uploads/2016/03/Report_IATF-2016-full.pdf)
46. Smith RD and Mackellar L (2007) Global public goods and the global health agenda: problems, priorities and potential. *Globalization and Health*. BioMed Central. Available at: <http://globalizationandhealth.biomedcentral.com/articles/10.1186/1744-8603-3-9>
47. See article on HIV treatment as prevention on Avert, sections *HIV treatment is already being used as prevention* and *Limitations of treatment as prevention*: [www.avert.org/professionals/hiv-programming/prevention/treatment-as-prevention](http://www.avert.org/professionals/hiv-programming/prevention/treatment-as-prevention)
48. The significant objective classification under the DAC policy marker system, where the marker in question is important *although not one of the principal reasons for undertaking the activity*, is not used as a criteria to measure GPGs in the estimation methodology here. This decision was made due to the aim not to capture full disbursements for projects that may only contain a component of the GPG activity being measured or may be distant or a step removed from it. This methodology, however, may lead to an underestimate in the measurement of certain GPGs because it does not capture the relevant components of GPG expenditure within significant marked activities.
49. The Busan Partnership for Effective Development Cooperation, [www.oecd.org/development/effectiveness/busanpartnership.htm](http://www.oecd.org/development/effectiveness/busanpartnership.htm)
50. [www.oecd.org/dac/stats/dacandcrscodelists.htm](http://www.oecd.org/dac/stats/dacandcrscodelists.htm)
51. Desai M (2003) Chapter 'Public Goods: A Historical Perspective' in 'Providing Global Public Goods'. UNDP, see: <http://web.undp.org/globalpublicgoods/globalization/pdfs/Desai.pdf>  
[www.cgdev.org/files/1424979\\_file\\_Birdsall\\_Leo\\_Find\\_Me\\_the\\_Money\\_FINAL.pdf](http://www.cgdev.org/files/1424979_file_Birdsall_Leo_Find_Me_the_Money_FINAL.pdf)
52. The following post states only about US\$3 billion out of US\$125 million in ODA to GPGs. [www.cgdev.org/blog/world-bank-study-explores-options-global-public-goods](http://www.cgdev.org/blog/world-bank-study-explores-options-global-public-goods)