

South-South Programme

Building a South-South coalition on foundational learning
through education exchange and evidence synthesis



Global Public Goods in Education: Definition and current scenario

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¹ This document was produced in 2023 by Nikunj Agarwal during an internship for the Lemann Foundation Programme at the Blavatnik School of Government at the University of Oxford to support the South-South Programme.

Global Public Goods

What are global public goods?

Global public goods (GPGs) are goods and services that are non-rivalrous and non-excludable, meaning they can be used by everyone without depletion or restriction, providing benefits that extend beyond national borders. For example, the IMF's surveillance of global financial markets and members' economies helps detect systemic risks and vulnerabilities early on in the global economy. The resulting early warning system encourages countries to take steps at home to reduce the risks of a global crisis (Birdsall and Diofasi, 2015).

Joseph Stiglitz's seminal work in 1995 identified five examples of international public goods: international economic stability, international security, global environment, international humanitarian assistance, and knowledge. Many GPGs are not purely non-rivalrous or non-excludable, classifying them as mixed or quasi-public goods. Take climate stability, for example: while everyone benefits from a stable climate, human activities like greenhouse gas emissions can negatively affect it, introducing elements of rivalry and potential excludability. Access to the benefits of a stable climate can be limited to those who have the means to protect themselves from the negative impacts of climate change, for example, by being able to afford to change where they live or invest in adaptive technologies like advanced climate-controlled housing and resilient infrastructure, leaving others vulnerable.

In addition to these types of GPGs, Inge Kaul and colleagues (2003) identified two additional types: natural global commons, such as the ozone layer or orbital space, and "conditions and policy outcomes," such as world peace or global health. While natural global commons are produced through protecting them, policy outcomes require national-level action to produce them.

Global concerns as global public goods: a selective typology						
Class and type of global good	Benefits		Tendency supply or use problem	Global problem	Costs	
	Non-excludable	Non-rival			Non-excludable	Non-rival
1. Natural global commons Ozone layer	✓	✗	Overuse	Depletion and increased radiation	✓	✓
Atmosphere (climate)	✓	✗	Overuse	Risk of global warming	✓	✓
2. Human-made global commons						
Universal norms and principles (such as universal human rights)	[✓]	✓	Underuse (repression)	Human abuse and injustice	[✓]	✓
Knowledge	[✓]	✓	Underuse (lack of access)	Inequality	[✓]	✓
Internet (infrastructure)	[✓]	✓	Underuse (entry barriers)	Exclusion and disparities (between information rich and information poor)	[✓]	✓
3. Global conditions						
Peace	✓	✓	Undersupply	War and conflict	[✓]	✓
Health	✓	✓	Undersupply	Disease	✓	✓
Financial stability	[✓]	✓	Undersupply	Financial crisis	✓	✓
Free trade	[✓]	✓	Undersupply	Fragmented markets	✓	✓
Freedom from poverty	✗	✗	Undersupply	Civil strife, crime and violence	✓	✓
Environmental sustainability	✓	✓	Undersupply	Unbalanced ecosystems	✓	✓
Equity and justice	[✓]	✓	Undersupply			

✓- Yes; [✓] Partly; ✗ No

Table 1: A typology of public goods. Adapted from Table 1 in Kaul, Grunberg and Stern (1999)

While the provision of GPGs is crucial for humankind, their undersupply is a persistent challenge. One reason for this is the free-rider problem, where individuals can consume the benefits of GPGs without contributing to their provision. This is relevant for all GPGs, including education. Although education primarily benefits individuals who put in the effort to study through higher incomes and personal development, it also acts as a public good by providing societal benefits, such as a literate population, a skilled workforce, and improved economic prospects for future generations. In this sense, education draws analogy to other mixed GPGs, such as vaccination. For example, a person choosing to be vaccinated primarily benefits themselves, which may be a small benefit, but also contributes to preventing others from getting sick, which creates a larger positive spillover effect known as herd immunity.

Providing GPGs requires coordination and cooperation between multiple actors at different levels and sectors. Since the private sector lacks incentives to produce them, public-spirited actors such as NGOs, universities, governments, and international organizations play crucial roles in their provision. Success often depends on overcoming funding constraints, political barriers, and coordination problems to ensure that these goods and services are effectively delivered and maintained for the benefit of all.

How are global public goods generated in policy areas other than education, such as climate, trade, and health?

GPGs are essential to address various global and societal challenges, including climate change, health, and trade. These goods are typically generated through international cooperation and collaboration among different actors. The mechanisms and institutions in these other areas that generate GPGs and the challenges associated with their provision are explored below to reflect upon the question of what GPG-provision in education can learn from other policy domains.

Climate:

Climate change is one of the most significant challenges facing the world today. The Green Climate Fund (GCF) is a mechanism established under the United Nations Framework Convention on Climate Change (UNFCCC) to support developing countries in mitigating and adapting to climate change. The GCF is an example of an institution that generates GPGs in this area. It generates GPGs by providing financial resources to developing countries for climate change mitigation projects. These projects contribute to these goals by reducing greenhouse gas emissions and enhancing climate resilience.

Trade:

The World Trade Organization (WTO) is an institution that generates GPGs in trade. The WTO promotes global trade by providing a platform for countries to negotiate and implement trade agreements. These agreements generate GPGs by creating a more

open and predictable trading system, reducing trade barriers, and promoting economic growth and development.

Health:

The development and distribution of vaccines, medicines, and medical technologies are essential GPGs in the health sector. During the COVID-19 pandemic, vaccines have been identified as a critical GPG. The development and distribution of vaccines require international cooperation and coordination to ensure equitable access for all. The Global Alliance for Vaccines and Immunization (GAVI) and its partners played a key role in ensuring access to COVID vaccines, especially for countries in the Global South. GAVI is an example of an institution that generates GPGs in the health sector.

By examining these examples, we can identify commonalities and best practices in the provision of GPGs across various policy domains. These insights may help inform the development of mechanisms and institutions that effectively generate and distribute GPGs in the education sector, promoting equitable access and improving global educational outcomes.

What is similar and different about GPGs in education specifically, compared to GPGs that have been successfully created in other policy areas?

GPGs in education and other policy areas share several similarities:

- GPGs in climate, trade, health and education often face similar challenges in terms of resource constraints, insufficient funding, and lack of political will to invest in public goods that have long-term benefits (Gostin & Friedman, 2015; UNESCO, 2016). Lack of incentives and free-riding can lead to undersupply of GPGs. The production and distribution of GPGs in both education and other policy areas requires financing, and there may be debates around who should bear the costs.
- There is a potential role to play for public-private partnerships in the production and distribution of GPGs in both education and other policy areas, which require collective action and cooperation from multiple actors at the global level to address global challenges and ensure equitable access to these goods (Kaul et al., 1999; Gostin & Friedman, 2015; UNESCO, 2016).
- Both education and health are especially important for human development and well-being, and GPGs in these areas have significant spillover effects that benefit individuals and societies worldwide (United Nations, 2015; World Health Organization, 2021). Encouraging policymakers to recognise this can help to generate the political will to support GPG creation in this area.

However, there are also several differences between GPGs in education and other areas like health:

Time scales:

- The production of GPGs in education, like climate change, often requires sustained, long-term investment to have a lasting impact, even if there are pressing needs and emergencies that may feel immediate (Gostin & Friedman, 2015; UNESCO, 2016).

Regulation:

- GPGs in health are often subject to stringent regulatory frameworks, such as the International Health Regulations, which are legally binding to all World Health Organization states, and to other global governance mechanisms under the auspices of the WHO. GPGs in education, by contrast, are subject to fewer of these (Gostin & Friedman, 2015; UNESCO, 2016).

Contextualisation:

- The role of cultural and linguistic factors in education may require more localised approaches compared to other policy areas (Kaul et al., 1999; UNESCO, 2016). However, GPGs in health like vaccines still need to be contextualised in the sense that what is appropriate and trusted in the eyes of the local population should be considered prior to delivery; in some cases, local testing may be important.

Distribution:

- Digitisation, internet connectivity and related technologies have a clear role in the production and distribution of GPGs in education. To be sure, these also have a role in other policy areas, such as health and climate change, but in those other forms of technology and innovation can have generally greater impact – such as new treatments and renewable energy sources.
- The distribution of GPGs in health often requires more complex and specialised infrastructure, such as the storage and distribution of vaccines and medical supplies, whereas GPGs in education can often be delivered through more decentralised and community-based approaches (World Health Organization, 2021; UNESCO, 2016).
- In education, local governments, and especially schools and teachers, often play a more prominent role than in other policy areas like health and climate change, due to the greater contextualization demands of education. However, actors that operate above the local scale, like central governments and many NGOs, are also important in the production and distribution of GPGs in education. This suggests that GPGs should aim to both coordinate and guide these local actors for the purposes of consistency in areas where it matters, while also empowering them to bring in relevant contextualization. This dual approach

can help strike a balance between maintaining global standards and accommodating local needs and conditions.

Types of spillovers into other kinds of GPGs:

- As with trade and health GPGs, education GPGs have the potential to be a driver of economic growth and development (Kaul et al., 1999; UNESCO, 2016). Education GPGs, arguably more than these other kinds, have the potential to drive broader societal benefits, such as promoting peace and democracy (United Nations, 2015; UNESCO, 2016).

GPGs in education at the current juncture

A heightened need: the impact of COVID-19: School closures were used to protect children and communities from the impact of COVID-19. The COVID-19 crisis forced school closures in 188 countries, heavily disrupting the learning process of more than 1.7 billion children, youth, and their families (OECD, 2021). This had immediate short-term temporary effects in the form of learning loss (OECD, 2021). However, long-term impacts like curbing of educational aspirations or the disengagement from the school system may be irreversible (OECD, 2021).

There have been multiple adverse consequences from the use of school closures as a measure to shield children and communities from the effects of COVID-19. Interrupted learning has been one of the most significant outcomes of school closures, leading to a learning loss that has affected students of all ages and abilities (UNESCO, 2021).

Parents have also been affected by school closures, struggling to balance work and home-learning responsibilities while lacking the necessary resources, including laptops, internet connectivity, and educational materials (UNESCO, 2021). This has led to an uneven distribution of learning opportunities, with disadvantaged students and those from low-income households experiencing greater challenges.

School closures have also resulted in significant gaps in childcare, with parents struggling to find alternative care arrangements or having to leave their jobs to take care of their children. This has disproportionately affected women, who have had to take on a greater share of caregiving responsibilities and are more likely to drop out of the workforce.

Moreover, school closures have led to an increase in dropout rates, particularly among disadvantaged students and those from low-income households (UNESCO, 2021). This has long-term implications for their educational attainment and socio-economic prospects, as school dropouts tend to have lower levels of income and higher rates of unemployment.

The closure of schools has also increased the exposure of children to violence and exploitation, as they spend more time at home or in their communities. This includes increased risks of domestic violence, child abuse, and child labor.

Finally, school closures have presented new challenges to tracking education outcomes, as traditional methods of assessment and evaluation have been disrupted (UNESCO, 2021). This has made it difficult to measure the effectiveness of distance learning programs and to identify areas in need of improvement.

Given the scale and scope of these challenges, there is an urgent need to identify and facilitate the production of Global Public Goods (GPGs) in education whose benefits are scalable across populations. GPGs can help to ensure that all students have access to high-quality education, regardless of their socio-economic background or geographical location.

The challenge of under-funding: The challenge of under-funding is a significant issue in education, particularly in low and lower-middle-income economies. These economies were already facing a huge education funding and investment gap, and the COVID-19 pandemic, along with shifting priorities of international and national agencies, has exacerbated this situation (UNESCO, 2020). For example, in November 2020, the UK's Foreign, Commonwealth & Development Office (FCDO) announced that it intends to cut £4.5 billion of aid to countries like Bangladesh, South Sudan, and Syria, which are already witnessing huge funding shortages (UK Parliament, 2020). According to the Global Partnership for Education, less than 20% of educational aid goes to low-income countries, which represents a huge shortfall when compared to the amount needed to educate children in these countries (GPE, 2020).

In 2016, the Global Partnership for Education estimated that \$39 billion was needed by 2030 to achieve universal primary education. This translates to an average cost of \$1.25 per day per child in low-income countries to provide 13 years of education (GPE, 2020). To put this into perspective, \$1.25 is the equivalent of the cost of a cup of coffee in many developed countries, while in low-income countries, it can provide a child with access to education for a day. However, this cost is still a significant challenge for many families living in poverty, particularly in the context of the economic impacts of the COVID-19 pandemic.

The under-funding of education has a significant impact on the quality of education provided, as well as access to education. In low-income countries, this can lead to a lack of basic resources, such as textbooks and qualified teachers, and overcrowded classrooms (UNESCO, 2021). This, in turn, can lead to poor learning outcomes, high dropout rates, and a lack of progress towards achieving education goals.

To address this issue, there is a need for increased investment in education, particularly in low-income countries. This can be supported through a range of measures, including increased government spending, foreign aid, and private investment in education (GPE, 2020). In addition, there is a need for greater accountability and transparency in education funding, to ensure that resources are targeted towards the areas of greatest need and are used effectively.

The issue of forming and strengthening alliances and networks:

The issue of forming and strengthening alliances and networks is a critical challenge for improving education outcomes, particularly in low-income countries (UNESCO, 2017; Brookings, 2019; GEM, 2021). There is evidence to suggest that there is a lack of strong alliances and networks working together to deliver relevant education interventions (UNESCO, 2017; GEM, 2021). While multilateral organizations and donor agencies can play a valuable role in supporting education interventions (GPE, 2016; World Bank, 2018), there is a need to ensure that these partnerships are more inclusive and participatory, with a greater focus on engaging with local stakeholders and communities (Devarajan & Reinikka, 2013; Johnson, 2019).

According to a report by UNESCO, the lack of collaboration and coordination among education stakeholders is a major challenge in achieving education goals (UNESCO, 2017). The report notes that education systems often operate in silos, with little interaction between different actors, including governments, civil society organizations, and the private sector. This fragmentation can lead to duplication of efforts, inefficiencies, and a lack of coherence in policy and program development (UNESCO, 2017).

Furthermore, a study by the Brookings Institution highlights the importance of partnerships in achieving educational outcomes (Brookings, 2019). The study found that effective partnerships between schools, community organizations, and other stakeholders can improve student outcomes, particularly for disadvantaged students. However, the study also notes that such partnerships are often difficult to establish and sustain due to a lack of resources, conflicting priorities, and other challenges (Brookings, 2019).

In general, alliances in education are being largely shaped by multilateral organizations and donor agencies in developed countries (GEM, 2021; Johnson, 2019). This raises questions around visions and targets for countries of the Global South being set by and evaluated in ways that have been designed by Global North actors. This dynamic can contribute to a lack of ownership and participation from local communities and stakeholders in shaping education interventions. For instance, a report by the Global Education Monitoring (GEM) team has highlighted the dominance of Northern-led

education partnerships in shaping the education agenda in low-income countries (GEM, 2021).

To address these challenges, policymakers can prioritize the development of partnerships and networks that are more inclusive and participatory, with a focus on engaging with local stakeholders and communities (Devarajan & Reinikka, 2013; GPE, 2016; Johnson, 2019). While multilateral organizations and donor agencies can play a valuable role in supporting education interventions (GPE, 2016; World Bank, 2018), there is a need to ensure that these partnerships are more inclusive and participatory, with a greater focus on engaging with local stakeholders and communities (Devarajan & Reinikka, 2013; Johnson, 2019). By prioritizing the development of more collaborative and participatory education partnerships, policymakers can help to ensure that education interventions are more effective and better aligned with the needs and priorities of local contexts (UNESCO, 2017; Brookings, 2019).

GAVI – A potential model for GPG in Education

Other policies areas, such as health, have managed to create GPGs and deliver impact at scale when faced with somewhat similar need and challenges. Hence, GAVI, also known as the Vaccine Alliance (previously Global Alliance for Vaccines and Immunization), may offer more specific insights for the education field. The three main pillars of GAVI's framework are strong partnerships and governance, innovative funding mechanisms, and identification of GPGs.

GAVI is a private-public partnership model aimed at improving people's health through equitable access to vaccines. Headquartered in Geneva, Switzerland, it has been operating for twenty-two years. As of 2021, GAVI had vaccinated close to 981 million children and as a result prevented around 16.2 million future deaths [GAVI].

Financing: GAVI's financing structure is a mix of standard and innovative financing (25% of the overall portfolio) is used to secure long-term funding for vaccines in different parts of the world. It further shapes the market through their massive orders while countries contribute to the fund based on their income. These orders or advance market commitments get activated if specific conditions around the vaccine are fulfilled. This not only incentivizes new companies to take the risk of developing new vaccines, but also creates a more competitive environment. Hence, in this way it overcomes the market failures.

The co-financing element of GAVI where governments contribute to the fund based on their capabilities, in some ways similar to countries' pledge and ratchet climate plans, addresses the free-riding issue associated with global public goods. Since, governments

share the cost, they are more likely to put forth human and financial resources towards immunisation efforts [GAVI].

“Gavi’s 2016 to 2020 strategy aspires to reach 300 million children with a Gavi supported vaccine by 2020 and is based on four strategic goals to deliver the mission:

1. The Vaccine Goal - accelerating equitable uptake and coverage of vaccines.
2. The Systems Goal – increase effectiveness and efficiency of immunisation delivery as an integrated part of strengthened health systems.
3. The Sustainability Goal – improve sustainability of national immunisation programmes.
4. The Market Shaping Goal – shape markets for vaccines and other immunisation Products.”

Partnerships: GAVI leverages the technical expertise of public-private partnerships to reach their overall goal.

Partner	Role
Bill & Melinda Gates Foundation	Seed money & Vaccine market shaping
World Health Organisation	Global Health Policy Advocacy & Implementation
UNICEF	Immunisation Programs Implementation
The World Bank	Development Assistance & Innovation Finance
Civil Society Organisations	Advocacy, Resource Mobilisation & Accountability
Developing Country Governments	Co-financing, Implementation & Identification of Vaccine needs
Developing country pharmaceutical industry	Vaccine supply
Industrialised country governments	Financing & Funding Advanced Market Commitments
Industrialised country pharmaceutical industry	Research & Technical Expertise for Vaccine Development
Research and technical institutes	Cutting-edge research

Table2: GAVI’s partners and their role [GAVI]

GPGs in Health: GAVI has clearly defined GPGs in health that it delivers, namely vaccines. Vaccines can be considered as global goods because it strongly contributes to disease eradication from which everyone benefits (Ridlo, 2020). It has delivered vaccines for Human Papillomavirus, Polio, Japanese Encephalitis, Meningitis A, Measles, Typhoid, Cholera, Rotavirus, Yellow fever, (Diphtheria, tetanus, pertussis, haemophilus influenza vaccine (Type B), Hepatitis B, Ebola vaccine and recently COVID-19 through COVAX vaccination plan.

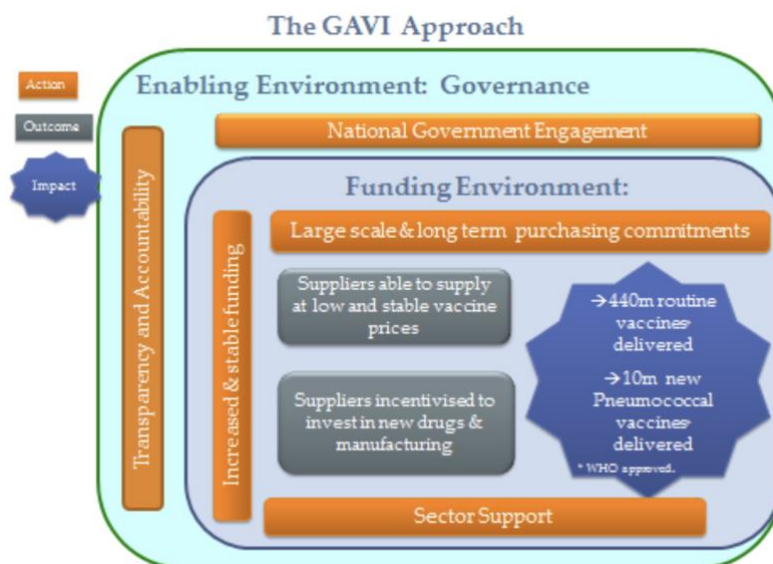


Figure 1: The GAVI Approach Framework [UNESCO]

Reflections for GPGs in education

Providing GPGs in education can be seen as vital for promoting human development, economic growth, and overall societal well-being. However, generating GPGs in education and other policy areas, such as climate and health, involves overcoming numerous challenges, including resource constraints, free-rider problems, and a lack of political will. To address these challenges effectively, it is crucial to create strong coalitions, partnerships, and coordination systems that engage a diverse range of stakeholders, including international organisations, governments, NGOs, and the private sector.

The discussion presented here is an initial exploration of ideas. Education policymakers and practitioners need to come together to further develop the conversation and identify effective strategies for generating and distributing GPGs in education. Establishing healthy coalitions in regions where they are most needed is a critical step in this process. Empowering these coalitions to set their own agendas, promote pluralism and internal democracy within their decision-making processes, and to engage in high-quality deliberation is essential.

Furthermore, these coalitions should be encouraged to strengthen themselves through cross-border collaboration and knowledge sharing with similar coalitions in other countries. While resources and expertise from international agencies and Global North institutions can be helpful in supporting these coalitions, it is crucial that such support is tailored to the specific needs and contexts of each coalition and not thrust upon them, and so is respecting and supporting of their autonomy. Coalitions should be driven by their own priorities, not those of outsiders.

One way to promote high-quality deliberation and informed decision-making within coalitions is by providing free and publicly available materials, such as those developed by the within the South-South Programme. By fostering inclusive and collaborative approaches to GPG provision in education, we can take positive steps towards overcoming existing challenges and towards equitable access to quality education for all, ultimately contributing to a brighter and more prosperous global future.

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