# Chapter 2

# The Concept and Definition of Global Public Goods

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The concept of global public goods is a useful tool for analysing the process of globalization from the point of view of the international community. This perspective reveals the growing interconnectedness of different trends and calls for greater responsibility and accountability on the part of key global actors. Rooted in the tradition of the political economy, it is still relatively new to the field of international relations. This chapter argues that the concept of global public goods should be taken up more actively by key international institutions, such as the European Union and the G8, in their practical policymaking.

#### The Role of the State in Providing Public Goods

The provision of public goods is one of the most important tasks of the modern state and, increasingly, of supranational and international organizations, such as the EU. Moreover, these institutions themselves may be seen as a 'public good' that should, according to institutional theory, establish clear 'rules of the game' and guarantee that every resident of a certain territory complies with them (North 1991). The importance of providing public goods has steadily grown as societies have evolved from agrarian to industrial and then from industrial to post-industrial.

In fact, in the Middle Ages rulers were concerned mainly with safeguarding the security of the inhabitants of their land and providing a minimum standard of medical care in case of epidemics (Desai 2003). Modernity brought significant growth in the amount and quality of state-provided public goods. The wealth of nations has increased with the development of capitalism, as citizens started to pay more taxes and demand more social services. The establishment of institutions and infrastructure necessary for economic growth became an immediate task for the states.

Adam Smith was one of the first who 'made a powerful plea for the state to provide education and training to overcome the debilitating effects of the division of labor in modern factories' (Desai 2003). In the 19th century the state began to regulate daily working hours. Added to these demands were calls to develop urban infrastructure and build roads and water systems as well as provide citizens with housing.

Another breakthrough, in the 20th century, was the welfare state, with its theoretical foundations based on the concept of global public goods: states should take responsibility for social welfare of citizens and for correcting the failures and negative externalities of the market. As a result, the provision of goods and services such as roads and primary education increased, and public health, housing, and higher education started to be seen as public goods. The amount of social payments and number of claimants have grown steadily (Desai 2003). The concept of public goods became one of the pillars of the science of economics.

Moreover, the issue of public goods delivery has gradually been internationalized, as states become more interconnected and interdependent through networks of supranational and international organizations and regimes that promote political, social, and economic cooperation. This list includes the World Trade Organization (WTO), the World Bank, the EU, and the G8. The massive changes of the late 20th and early 21st centuries have had a considerable influence. The collapse of communist regimes at the end of the 20th century necessitated new state institutions. The processes of globalization have eroded state sovereignty and a variety of new actors, namely transnational corporations, nongovernmental organizations (NGOs), and supranational structures have emerged. The expansion of capitalism and democracy and a qualitative leap in the development of technologies have raised the question of whether globalization provides new opportunities for reducing poverty and inequality or only widens social inequality. The concept of global public goods forms part of the answer to this question.

#### The Concept of Global Public Goods

Public goods are those goods and services that, being granted to one person, may be available to others without additional cost incurred to them (Block 2004). They are characterized by non-excludability and non-rivalry in both provision and consumption. Non-excludability means that the producer of a good cannot prevent other persons from enjoying it; non-rivalry assumes that consumption by one person does not diminish its availability for others (Afontsev 2003). National security, economic stability, social order, and the rule of law are public goods provided by government.

Few public goods are 'readymade'. On the contrary, the decision to make a certain good public or private is a result of social processes and political choices. The amount of financing allocated to providing public goods is defined through a process of political bargaining influenced by voters' choice of political parties. For example, public health and higher education vary in their extent of non-excludability and non-rivalry: they may be free or paid for; hospitals and universities may accommodate more or fewer patients and students, respectively. Television may be public and accessible to all who live in the broadcasting area, or it may be an excludable good as in the case of cable or private television.

The fact that some individuals and groups may benefit more than others from public goods does not change the main properties of those goods. However, it can determine voters' preferences and government policies. It can also increase the risk of free riding by avoiding the high costs of providing public goods (Afontsev 2003). The problem of distributing costs and benefits is especially sensitive with regard to global public goods.

Historically, one of the first global public goods was the principle of freedom on the high seas, which had been negotiated early in the 18th century (Gureev 1987). Later, the rules of international trade and travel between countries were established in the 19th century. Throughout the 20th century, further development of the principle was impossible because of the geopolitical and ideological rivalry among major powers — Germany, France, and Great Britain at the beginning of century; the USSR and the United States in its second half. The conditions remerged only at the end of the 20th century following the breakup of the Soviet bloc and the acceleration of globalization.

The benefits (and costs) of global public goods cut across state, social, and generational borders. They should extend to at least two countries, if not more, and should not discriminate against any population group or generation (Kaul and Mendoza 2003). Global public goods are characterized by the same features as national public goods, namely non-excludability and non-rivalry, seen from the standpoint of international actors. Examples of global public goods are the environment, communicable disease control, and financial stability.

Some public goods are invariably global in origin and characteristics (such as the ozone layer and climate); others emerge as a result of human activity (knowledge, human rights, cultural heritage, the internet) or represent a certain group of global policy outcomes and efforts aimed at guaranteeing peace and security, sustainable development, free trade, equality, and justice.

Different types of global public bads exist along with global public goods (Kaul, Grunberg, and Stern 1999). This term describes the opposite of global public goods: destruction of the environment, spread of infectious diseases, terrorism, the abuse of human rights, and so on. Global public bads emerge in the most cases as negative externalities when individuals, firms, or other actors undertake actions but do not bear the full costs, and usually attract more attention than global public goods.

#### **Factors Contributing to Global Public Goods**

National and global public goods do not contradict each other. On the contrary, in the globalized world, the creation of one contributes to the provision of others. Material welfare encourages people to take advantage of globalization more actively and leads to the spread of post-material values in developed societies. So the realization of humanitarian programmes in poor countries helps to reduce the global gap between the North and the South, which is why supranational

and international organizations should implement such initiatives. In general, strengthening the interdependence between countries changes the perception of social reality and promotes the recognition of the importance of global public goods.

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In recent decades, most global public goods are national public goods that have gone global (Kaul and Mendoza 2003). The doctrine of human rights, originally acknowledged only in some Western countries, became universal in 1948. At the end of the 20th century they became the ideological and institutional basis of a new world order (Medvedev 1999). The interdependence of economies has since grown to such an extent that financial stability and economic growth are impossible without coordination at the international level. People now understand that the environment is common to all the Earth's inhabitants and does not respect borders, so that environmental policy cannot be limited by the borders of individual states.

The development of new technologies is undoubtedly one of the greatest catalysts for change in lifestyles and world-views. First, new technologies have increased the quality of life and wealth of nations. Second, they lower transport and transaction costs, enhancing the mobility of goods, services, information, and people. Third, in conditions of decreasing economic and political barriers, global actors can use existing technology effectively, cooperating with each other, for example, in response to international political crises or in order to develop new production chains.

In many ways, the emerging international system is unique because its basic principle is not a balance of power or the doctrine of deterrence. The international system is built on 'network logic' that includes new members (Kaul, Grunberg, and Stern 1999). The larger the network, the greater the benefits to its members. The addition of new members, far from taking away from existing consumers (or members of the network), enhances the opportunities for all. States and actors tend to refuse non-cooperative strategies, understanding that such strategies may undermine the ability to respond to new systemic risks, such as climate change, excessive economic and financial volatility, or growing social inequality. Cooperation exists especially at the regional level.

Regional economic and political organizations tend to promote liberal world order and enhance the openness of states rather than divide the world into several 'protectionist fortresses' (Afontsev 2003). The best example here is the EU, an institution whose members have a long history of conflicts but realize the positive potential of collaborating on the provision of public goods. By this 'regionalization' of national public goods, member states have not only benefited economically themselves, but have also created a surplus product valuable for all in the world. New opportunities for cooperation with the EU were also opened up for other countries. The EU also had, at its disposal, more funds and other resources for increasing foreign assistance.

## **Types of Global Public Goods**

Global public goods are a recent but highly important link in the chain of creation of public goods. Virtually all economic agents participate in their production and provision, namely producers and consumers of private goods, states, supranational and international organizations, and international political regimes (as in treaties and organizations). The producers pay taxes and can voluntarily help those NGOs that pursue transnational goals. The states provide public goods that benefit their citizens but are also used to create global public goods (for example, national air navigation systems). Most regional economic and political organizations aim at guaranteeing the conditions for peaceful development and sustainable economic growth in a particular territory that also benefit the entire international community. These organizations and the goods they provide can thus be characterized as 'intermediate' global public goods, which make possible the provision of 'final' ones (Afontsev 2003).

Global public goods may be divided into three classes according to the nature of their publicness and the conditions of their provision (Kaul and Mendoza 2003). The first class consists of global natural commons, such as the atmosphere and the high seas. As already mentioned, such global public goods are non-excludable and rival goods, although they are de facto available to all (Gardiner and Le Goulven 2002). This type of global public goods can be overused and abused, and may be difficult to renew.

The second class of global public goods consists of global human-made commons, such as theoretical and applied knowledge and global networks of information and transport communications (Kaul and Mendoza 2003). Access to such goods may be free or limited. For example, knowledge of the Pythagorean theorem cannot be limited, while access to the newest inventions is usually protected by patents and licences. Most of these goods are national public goods that become global and are non-excludable at the international level. However, it is difficult to guarantee their non-excludability to prevent underuse and illegitimate restricted access.

The third class of global public goods consists of global political outcomes (Kaul and Mendoza 2003). Unlike other goods, these are not material objects and cannot be created once and for all. Examples are international peace, free trade, the fight against infectious diseases, and environmental protection. These goods are non-excludable and non-rival, but the lack of institutional mechanisms and incentives to cooperate usually prevents key international actors from providing them.

Figure 2.1 illustrates how overuse, underuse, undersupply, and abuse of global public goods threaten humankind's well-being. The overexploitation of global natural commons leads to non-sustainability and consequently to possible natural catastrophes. The rapid spread of global human-made commons can have positive and negative effects. In fact, the promotion of human rights, knowledge, and new technologies contributes greatly to the development of human capital,

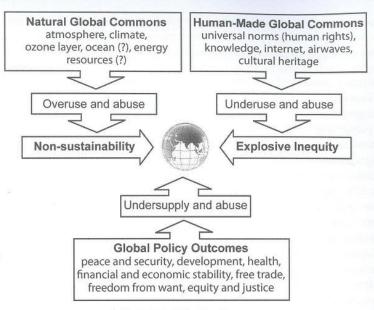


Figure 2.1 Typology of Global Public Goods

but may also increase the gap between those who are already enjoying these resultant benefits and those who lack resources for development. The domestic and international policy agenda of most countries should be oriented towards creating positive global political outcomes. It is the primary task of political leaders to ensure the peaceful development of the international community, stable economic growth, and social justice. It is thus important to classify different types of global public goods and design proper political strategies to tackle the existing problems of their supply.

Global public goods may be further divided into four categories: economic, social and political, infrastructural, and environmental global public goods (see Table 2.1).

Economic global public goods are liberal trade regime (free trade), financial and economic stability, sufficient supply of natural resources (for example, oil) critically important for the world's economy.

Social and political goods are safeguarding international peace and security, mediating conflicts, observing human rights, maintaining the rule of law and social order, fighting disease and improving medical standards. These goods cannot exist without effective institutions at different levels of global governance.

Table 2.1 Global Public Goods and Global Public Bads

Type of global public goods	Benefits		Nature of supply problem	Corresponding global public bads	Costs	
	Non- excludable	Non- rival			Non- excludable	Non- riva
			Economic			
Liberal trade	+ (partly)	+	Undersupply	Fragmented markets	+	+
Financial and economic stability	+ (partly)	+	Undersupply	Financial crises, excessive volatility	+	+
Provision of the resources to the world economy	-	-	Undersupply	Lack of resources	+	+
economy			Social and politic	cal		
Peace and security	+	+	Undersupply	Wars, conflicts, terrorism	+ (partly)	+
Human rights	+ (partly)	+	Underuse, lack of access	Human rights abuse, discrimination	+ (partly)	+
Rule of law and social order	+ (partly)	+	Undersupply	Social conflicts, injustice, corruption	+ (partly)	+
Fighting disease	+	+	Undersupply	Infectious diseases (AIDS, malaria)	+	+
V1.453.4		·	Infrastructura	l		
Global system of air navigation	+	+	Underuse	Incompatibility of standards	+	+
Internet	+ (partly)	+	Underuse, lack of access	Barriers to the internet (censorship, absence of physical infrastructure)	+ (partly)	+
Knowledge	+ (partly)	+	Underuse	Barriers to information	+ (partly)	+
risk-o e de	Or tall		Environmenta	l	196	
Ocean	+	-	Overuse	Contamination of the ocean	+ (partly)	+
Atmosphere, climate stability	+	-	Overuse	Global warming	+	+
Biodiversity	+	+	Overuse	Disruption of ecosystems	+	+

Source: Gardiner and Le Goulven (2002).

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Infrastructural goods are the result of cooperation among different countries and the standardization of goods provided by them. Examples include global air navigation systems, the physical and virtual infrastructure of the internet, and knowledge in its broadest sense.

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Ecological goods are the ocean, atmosphere, biological diversity, climate stability, and so on.

#### Global Public Bads

Global public bads are phenomena and processes opposite to global public goods: international crime, terrorism, poverty and inequality, the spread of communicable diseases, the abuse of human rights, and environmental degradation (Gardiner and Le Goulven 2002). Despite considerable progress in recent years in overcoming political and financial gaps, global public bads are often a higher global priority, for developed and developing states as well as for supranational and international organizations, than global public goods.

Global bads are more public than global goods. They attract the attention of the public, mass media, and politicians. While the creation and provision of goods are usually perceived as a routine process, public bads appear in concrete forms that threaten people's lives and well-being daily, and thus provoke a wide public response. In an ideal model, the provision of global public goods should lead to the eradication of bads and vice versa. In reality, however global public policy is based on other principles, being accountable to citizens of democratic countries and to mass media.

Investment in providing global public goods does not usually generate immediate effect. The benefits cannot always be calculated in terms of economic efficiency and should be directed to the poorest areas of the world. Consequently, it is difficult to move beyond the rhetoric on the common challenges of globalization to real action. The United States spends around 20 percent of its federal budget on defence, which is approximately 16 times more than its foreign policy spending (Nye 2002). In sum, the country spends only 0.1 percent of its gross domestic product (GDP) on aid to foreign countries, which is three times less than the EU and seven times less than the level of spending on official development assistance recommended by the UN (0.7 percent GDP) (Nye 2002; Gates 2010).

The international agenda is oriented towards the struggle with global public bads rather than the provision of global public goods. Rich countries have enough knowledge, technologies, and resources to protect against global threats - and sometimes prefer to distance themselves from the instability and conflict areas. On the one hand, the September 11 attacks showed the futility of such a strategy and the need for a global security system. On the other hand, the consequences of subsequent invasions into Afghanistan and Iraq revealed the inadequate legitimacy of 'liberal imperialism' and exposed rifts within the West.

In the modern world, public bads arise because nation-states and international organizations do not produce enough global public goods. Moreover, differing definitions of good and bad, global inequality, and lack of cooperation among states make it difficult to formulate clear strategies. International cooperation is often restricted by the lowest common denominator, which is the struggle with existing problems, but does not lead to reduced costs. On the contrary, spending on defence, conflict management, the establishment of new international institutions, the response to natural disasters (which are all measures to counter global bads) may considerably exceed the long-term investment in the provision of global public goods. In the long run, providing global public goods is more cost-effective than fighting global public bads. There is thus a demand for new approaches to the problem of international collective action.

## Global Public Goods and the Problem of Collective Action

The deep transformation of the last 20 years, since the end of the Cold War, has radically changed the global geopolitical landscape. The erosion of state sovereignty, growing interdependence among key international actors, and the emergence of new actors (such as transnational corporations and international NGOs) have led to the 'globalization' of the concept of public goods. Global public goods should produced and provided at the international level, rather than the national level, and key international organizations and forums should drive positive change. Another shift is the widening of the range and scope of problems facing the international community. Human rights abuse as well as social and ethnic conflicts with regional and global impacts (such as political destabilization and migration) are no longer restricted to a country's domestic affairs. Moreover, the global economy has reached an unprecedented level of integration, as demonstrated by the financial crisis of 2008.

However, this globalized world is not becoming any more equal. The US and the EU maintain the lead in global politics, economy, and culture. In the final analysis, the prospect of fighting global public bads boils down to the ability of Western countries to respond to external threats and overcome their self-interest. The provision of global public goods is impossible without the commitment of those countries to make long-term investments and to give up voluntarily some of their super-profits in favour of the 'black hole' of developing countries. The rise of China and the realization of the principle of sharing global responsibility has led to some hope of revising the global agenda (Lomanov 2008). However, since its economic development is to a large extent the result of the wealth of the key consumers of Chinese goods – in the US and Europe – China's position has been undermined by the global financial crisis.

The lack of international collective action is one of the main obstacles to creating stable mechanisms for providing global public goods. The common aims of international actors are vague; they lack the understanding and vision of collective action and coordination. There is no clear solution to the problem of distributing the costs of providing of global public goods, and the temptation of free riding is too strong. Traditional and rational thinking is sometimes not able to understand the stimulus of those who engage in humanitarian activities. However, the number of transnational NGOs that address global humanitarian concerns is growing, and this is an encouraging fact.

There are three main strategies for creating global public goods: summation, weakest link and best practice (Kaul, Grunberg, and Stern 1999). Summation aims at pooling the efforts of all stakeholders, but carries the greatest risk of free riding. Its essence is simple: everyone contributes to the creation of the global public good, for example, trying to reduce carbon dioxide emissions. An overall reduction of emissions is a result of actions of all the participants irrespective their size, status, and geographical location.

In the weakest link strategy, the provision of the global public good is measured by the effort of the weakest member. Most developed countries will make considerable progress in their fight against infectious diseases or terrorism, but the creation of the final good – that is, the eradication of these public bads – is impossible without involving every country in the world. Cooperation with the weakest links in the chain is thus critical to the provision of global public goods.

Best practice is the most promising method for creating global public goods. It is best suited to the current deep social and technological gap between the North and the South. The provision of global public goods in these conditions is a prerogative of developed countries, which have considerable knowledge and opportunities to develop environmentally friendly technologies, overcome infectious diseases, and respond to emergencies. There is, however, a question about whether these public goods are truly global or whether they deepen the gap between the richest and poorest parts of humanity.

Multidimensional international cooperation is undoubtedly the main prerequisite for progress in providing global public goods. The foundation has been laid since the 1990s. Much depends on the strategies of countries in managing the global financial and globalization crisis that began in 2008. The first steps must be taken by the Western countries and their multilateral institutions. The future of the humanity depends on the resolve of the EU, the G8, and the G20 to create and provide global public goods in a proactive and preventive manner, as these groups and their members have both the influence and the resources to bring about the necessary positive changes in international cooperation.

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