# PART I

# ANALYTICAL PARADIGM

# Chapter 2

# The Concept and Definition of Global Public Goods

Sergey Medvedev, Igor Tomashov

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

The provision of public goods is one of the most important tasks for modern states. Moreover, the state itself may be seen as a "public good" which should according to the institutional theory establish in society clear "rules of the game" and guarantee that every resident of a certain territory complies with them (North 1999). The importance of the provision of public goods has steadily grown as the societies have evolved from agrarian to industrial, and then from industrial to postindustrial.

In fact, during the Middle Ages the main concerns for the rulers were safe-guarding the security of inhabitants of their land and providing minimum standard of medical care in case of epidemics. Modernity brought about significant growth in the amount and quality of state-provided public goods. The wealth of nations has increased with the development of capitalism, citizens started to pay bigger taxes and to demand more social services. The establishment of institutions and infrastructure necessary for economic growth has become an immediate task for the states.

Adam Smith was one of first who "had 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 19<sup>th</sup> century the state began to regulate the daily working hours. Added to these demands were the calls to develop urban infrastructure, build roads and water systems as well as provide citizens with housing.

Another breakthrough in the sphere of the provision of public goods was made in the 20th century; its theoretical foundations were laid by the concept of the "welfare state". It was proclaimed that states should take responsibility for social welfare of the citizens and for the correction of the failures and negative externalities of the market. As a result, one can observe an increase in the provision of such goods and services as roads and education; public health, housing and higher education started to be seen as public goods; the size of social payments and amount of claimants has been permanently on the increase (Desai 2003). The concept of public goods has become one of the pillars of the economic science.

The massive changes of the late 20<sup>th</sup> and early 21<sup>st</sup> centuries had a considerable influence on the system of the provision of public goods. The collapse of the communist regimes has necessitated the establishment of the new effective state institutions; the processes of globalization have led to an erosion of state sovereignty and to the emergence of a variety of new actors, namely transnational corporations, non-governmental organizations, and supranational structures. The wave of the expansion of capitalism and democracy, as well as a qualitative leap in the development of technologies, have brought forward a question of whether globalization is providing new opportunities for development for the poor and inequality reduction, or only widening the global social inequality. The concept of global public goods was formulated as a part of the answer to this question.

### The Notion of Global Public Goods

Public goods are those goods and services which being granted to one person may be available to others without any additional costs incurred to them (Block 2004). Their key characteristics are non-excludability and non-rivalry in their 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). The examples of public goods are national security, economic stability, and social order and rule of law provided by the 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 size of financing the provision of public goods is defined in the course of the political bargaining influenced by the voters' decisions to support one or another political party. For example, public health and higher education are the goods, which have different extent of non-excludability and

non-rivalry: they may be free or paid services; hospitals and universities may accommodate more or less patients and students, respectively. Television may be public and accessible for all who live in the broadcasting area, or it may be an excludable good in the case of cable or private TV.

The fact that some individuals and groups may benefit from the provision of public goods more than others does not change the main properties of these goods. However, it can determine the voters' preferences and government policies as well as aggravate the "free-rider problem" (since there are stimuli to avoid bearing costs of provision of public goods) (Afontsev 2003). The problem of distribution of costs and benefits is especially sensitive at the international scene when it comes to the provision of the so-called global public goods.

Historically, one of the first global public goods was the Principle of Freedom on the High Seas, which had been negotiated in the early 18<sup>th</sup> century. Later, the rules of international trade and travelling between countries were established in the 19<sup>th</sup> century. Throughout the 20<sup>th</sup> century the development of the concept of global public goods was impossible because of the geopolitical and ideological rivalry between major powers: Germany, France and Great Britain at the beginning of a century; the USSR and the US in its second half. The conditions for emergence of the concept of global public goods appeared only at the end of the 20<sup>th</sup> century following the breakup of the Soviet bloc and the acceleration of globalization.

Global public goods are goods which benefits (and costs) cut across state, social and generation borders. At least they should extend to more than one group of countries and should not discriminate against any population group or generation (Kaul, Grunberg et al. 1999). 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. The examples of global public goods include environment, communicable disease control, and financial stability.

Some public goods are invariably "global" in its origins and characteristics (ozone layer and climate stability); others emerged as a result of human activity (knowledge, human rights, world 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.

It is worth mentioning that different types of global public "bads" exist along with global public goods. By this term one can describe the effects op-

posite to the respective global public goods – destruction of the environment, spread of infectious diseases, terrorism, abuse of human rights. Emerging in the most cases as negative externalities in the situations when an individual, firm or any other actor takes an action but does not bear the full costs, they usually attract more attention of the international community than the creation of global public goods.

# The Factors of Emergence of Global Public Goods

National and global public goods do not contradict each other. On the contrary, in the globalized world, the creation of one goods contributes to the provision of others. Material welfare stimulates people to use more actively the advantages of globalization 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. In general, strengthening the interdependence between countries changes our perception of the social reality and promotes the recognition of the importance of global public goods.

The bulk of global public goods are national public goods that have gone global in recent decades (Kaul, Mendoza 2003). The doctrine of human rights, originally acknowledged only in some Western countries, became universal in 1948, and at the end of the 20th century turned into one of the ideological and institutional bases of a new world order. The interdependence of economies has grown to an extent that makes the provision of financial stability and economic growth impossible without coordinated actions at the international level. People began to understand that the environment is a common heritage of all inhabitants of the Earth, and that negative effects cut across state borders, meaning that ecological policy cannot be limited by the borders of individual states

The development of new technologies is undoubtedly one of the most intense catalysts for ongoing changes in lifestyles and world views. Firstly, it increases the quality of life and the wealth of nations. Secondly, it lowers transport and transaction costs, enhancing the mobility of goods, services, information and people. In the conditions of decreasing economic and political barriers between countries different global actors have an opportunity to use existing technological potential effectively.

The emerging international system is in many ways unique because its basic principle is not a balance of power or the doctrine of deterrence. Right the opposite, it is built upon the "network logic" aimed at the inclusion of new members. The larger the network, the larger the benefits to its members; addition of new members, far from taking away from the existing consumers (or members of the network), enhances the opportunities for all (Kaul, Grunberg et al. 1999). The states and actors tend to refuse non-cooperative strategies, understanding that they may undermine their ability to respond to the new systemic risks, such as climate change, excessive economic and financial volatility, growing social inequality. The development of cooperation is especially active at the regional level.

It is worth noting that regional economic and political organizations promote liberal world order and enhance openness of the states rather than divide the world into several "protectionist fortresses" (Afontsev 2003). The best example here is the EU, an institution whose members have gone through a long history of conflicts but finally realized the positive potential of the collaborative work on the provision of public goods. By "regionalization" of national public goods member-states have not only benefited themselves economically, but they also created a surplus product valuable for all in the world. For example, the travel-free Schengen zone today is a global public good for the rest of humanity.

# The 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 provision, namely producers and consumers of private goods, states, international political regimes (treaties and organizations). The former pay taxes and can voluntarily help those non-governmental organizations which pursue transnational goals. The states provide public goods beneficial first of all for their citizens but also used as "bricks" for creating global public goods (e.g. national air navigation systems). The majority of regional economic and political organizations aim at guaranteeing on a certain territory the conditions for peaceful development and sustainable economic growth which is also beneficial for the entire international community. That is why these organizations and goods provided by them may be characterized as "intermediate" global public goods, which make possible the provision of "final" ones (Afontsev 2003).

As pointed out above, global public goods may be divided into three main groups by the nature of their publicness and the conditions of their provision (Kaul, Mendoza 2003). Firstly, there are *global natural commons*, e.g. the atmosphere and the high seas. These are non-excludable and rival goods, although de facto available to all (Gardiner, Le Goulven 2002). The key prob-

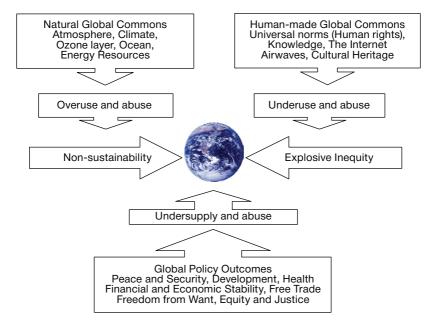
lems of the provision of this type of global public goods are their overuse and abuse, and the difficulties of their renewal.

The second type of global public goods is *global human-made commons*. The examples include theoretical and applied knowledge, global network of information and transport communications. An access to these goods may be free or limited: for example, the knowledge of Pythagorean Theorem cannot be limited while the access to newest inventions usually protected by patents and licenses is limited. The majority of these goods are national public goods, which have gone global and have become non-excludable at the international level. However, a complex task of guaranteeing their non-excludability causes the main problems of their creation and provision, namely the underuse and illegitimate restriction of access to them for the larger part of the humanity.

The third group of global public goods consists of global political outcomes. Unlike other goods, they are not material objects and cannot be created once and for all. The examples are international peace, free trade, struggle with 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.

All recognized global public goods may be divided into four categories: economic, social and political, infrastructural, and environmental global public goods.

- Economic global public goods are liberal trade regime (free trade), financial and economic stability, sufficient supply of natural resources (e.g. oil) critically important for the world's economy.
- Social and political goods are safeguarding international peace and security, mediation of conflicts, observance of human rights, maintenance of the rule of law and social order, struggle with illnesses and improvement of medical standards. It shall be stressed that the provision of these goods is impossible without the establishment of effective institutions at different levels of global governance.
- Infrastructural goods are those which emerge as a result of cooperation between different countries and standardization of goods provided by them. The examples include global air navigation system, physical and virtual infrastructure of the Internet, knowledge in a broad sense of this word.
- Finally, ecological goods are the ocean, atmosphere, biological diversity, climate stability, etc.



**Figure 2.1.** The Typology of Global Public Goods

#### Global Public Bads

The concept of global public bads is a reverse side of the concept of global public goods; global public bads are phenomena and processes opposite to those addressed as global public goods: international crime, terrorism, poverty and inequality, spread of communicable diseases, abuse of human rights, environmental deterioration. Struggle with different types of global public bads usually has a higher place in the global agenda than the provision of global public goods. And despite the considerable progress in the last years an overcome of the political and financial gap between these tasks is still a top priority for the entire international community.

Global bads are more public than global goods – they attract more attention of society, mass media, and politicians. While the creation and provision of goods are usually perceived as a routine process, public bads appear in concrete forms and facts threatening people's daily lives and well-being, and thus draw a wide public response and make people speak up. In an ideal model the provision of global public goods should lead to the eradication of bads, and vice versa. That is why researchers call politicians to pay more attention to a

positive agenda. But in reality global public policy is based on other principles, being accountable to citizens of democratic countries and mass media.

Investment in the provision of global public goods usually does not generate immediate effect. Their benefits cannot always be calculated in terms of economic efficiency. They should be directed to the poorest areas of the world, "buried in the sand" almost literally. This prevents one from moving from the rhetoric on common challenges of globalization to real actions. The US, the leader of the modern world, spends around 16% of its federal budget on defense, which is 16 times more than its foreign policy spending (Nye 2002). In sum, the country spends only 0.1% of its GDP on aid to foreign countries, which is three times less than the EU does, and seven times less than the level of spending on the economic assistance recommended by the UN (0.7% GDP) (Nye 2002; Nuscheler 2003).

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 secure themselves against global threats – and sometimes they prefer to distance themselves from the instability and conflict areas, creating "gated communities". From the one side, the 9/11 attacks showed the sheer futility of this strategy and the necessity to create a global security system. From the other side, the consequences of invasions of Afghanistan and Iraq organized thereafter revealed a lack of legitimacy of the policy of "liberal imperialism" and the emergence of rifts within the West.

In the modern world public bads exist and develop because of the lack of efforts to provide global public goods by nation states and international organizations. Moreover, differences in defining "good" and "bad", global inequality, difficulties of cooperation between states prevent the formulation of a clear strategy of humanitarian policy. International cooperation is often restricted by the lowest common denominator which is the struggle with existing problems, but this does not lead to the minimization of costs. Right the opposite, spending on the defense, conflict management, establishment of the new international institutions, struggle with natural disasters (all measures to counter global bads) may considerably exceed the size of long-term investments in the provision of the global public goods. In the long run providing global public goods is more cost-effective than fighting global public bads. All these facts indicate the demand for new approaches to the problem of international collective action

**Table 2.1.** Global Public Goods (GPGs) and Global Public Bads (GPBs) (Gardiner, Le Goulven 2002)

Type of GPGs	Benefits		Nature of supply problem	Corresponding GPBs	Costs	
	Non- excludable	Non- rival			Non- excludable	Non- rival
Economic GPGs						
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	+	+
Social and political GPGs						
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)	+	+
Infrastructural GPGs						
Global system of air navigation	+	+	Underuse	Incompatibility of standards	+	+
The Internet	+ (partly)	+	Underuse, lack of access	Barriers to the Internet (censorship, absence of physical infrastructure)	+ (partly)	+
Knowledge	+ (partly)	+	Underuse	Barriers to information	+ (partly)	+
Ecological GPGs						
Ocean	+	_	Overuse	Contamination of the ocean	+ (partly)	+
Atmosphere, climate stability	+	_	Overuse	Global warming	+	+
Biodiversity	+	+	Overuse	Disruption of the ecosystems	+	+

#### Global Public Goods and the Problem of Collective Action

The deep transformation of the last twenty years has radically changed the global geopolitical landscape. Erosion of the state sovereignty, growing interdependence between key international actors and the emergence of new actors (transnational corporations, international non-governmental organizations) led to the "globalization" of the concept of public goods. Another shift is the widening of the range and scope of problems impacting the international community. Human rights abuse, social and ethnic conflicts causing the regional and global effects (political destabilization, flows of refugees) are not seen any longer as domestic affairs of a certain country. The international economic system has reached an unprecedented level of integration, which is being clearly demonstrated by current global financial crisis.

However, the "globalized" world is not becoming any more equal. The United States and the EU keep their leading positions in global politics, economy and culture. The prospect of fighting global public bads boils down, in the final analysis, to the ability of Western countries to respond to external threats and to overcome their self-interest. The provision of global public goods is impossible without their readiness to make long-term investments and to refuse voluntarily from part of their super-profits in favor of the "black hole" of the developing states. Some hopes of remaking the global agenda are connected today with the rise of China and the realization of the concept of "sharing global responsibility" (Lomanov 2008), but again the economic development of China is to a large extent just a derivative of the wealth of the key consumers of Chinese goods, the US and Europe, and the position of China is definitely undermined by the global economic crisis.

The problem of international collective action is one of the main obstacles preventing the creation of stable mechanisms of providing global public goods. The common aims of the international actors are vague; they lack the understanding and vision of the process of collective action and its coordination mechanisms; there is no clear solution to the problem of distribution of costs connected with the provision of global public goods; and a temptation of "freeriding" is too strong. Traditional and rational thinking is sometimes not able to understand the stimulus of those who engage in humanitarian activities. However, the amount of transnational non-governmental organizations 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 et al. 1999). "Summation" aims at combining efforts of all stakeholders but it also has the highest extent of "free riding". Its essence is rather simple: everyone contributes to the creation of the global public good, for example, trying to reduce the carbon dioxide emissions. An overall reduction of emissions is a result of actions of all the participants despite their size, status and geographical location.

In the "weakest link" strategy the provision of the public good is measured by the effort of the weakest member. The most developed countries may make a considerable progress in their struggle with infectious diseases or terrorism, but the creation of the "final" good, i.e. the eradication of these public bads, is impossible without an effective struggle with them in every country in the world. Within this strategy of critical importance is the factor of cooperation with the weakest links in the chain of the provision of global public goods.

The third method, "best practice", in the current conditions looks as the most promising one. It is best suited to the existing situation of the deep social and technological gap between the North and the South. The provision of global public goods in these conditions is a prerogative of the developed countries. They have considerable knowledge and broad opportunities to develop environmentally friendly technologies, to struggle with communicable diseases, to respond to the emergencies. The question is whether these goods are truly global or whether they deepen the gap between the richest and poorest parts of humanity.

A multidimensional development of the international cooperation is undoubtedly the main prerequisite for progress in the provision of global public goods. The bases for this process have been laid during the last twenty years. Much depends on the exist strategies from the current crisis of globalization. First steps, of course, have to be made by the representatives of Western countries and their multilateral institutions. The future of the humanity depends today on the resolution of the EU, the G8 and the G20 to create and provide global public goods in a pro-active and preventive manner.

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