

The concept of global public goods in contemporary international relations between Russia and China

Natalia Kononkova,*

Faculty of Economics, Lomonosov Moscow State University (Russia)

Yulia Bulgakova,

Faculty of Foreign Languages and Area Studies,
Lomonosov Moscow State University (Russia)

Natalia Kuznetsova,

Faculty of Foreign Languages and Area Studies,
Lomonosov Moscow State University (Russia)

Yulia Prokhodtseva,

Faculty of Foreign Languages and Area Studies,
Lomonosov Moscow State University (Russia)

Maria Ustiuzhanina,

Faculty of Foreign Languages and Area Studies,
Lomonosov Moscow State University (Russia)

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Abstract

The research concentrates on the development of the concept of global public goods in Russia and China, while new economic grounds are emerging, including a shift to digital economy and the COVID-19 pandemic. This concept is analyzed with a special emphasis on joint Russian-Chinese projects. The analysis is supplemented by a classification based on the financing of global public goods. The findings of our research show that the vast majority of global public goods are

* E-mail of the corresponding author: npkononkova@econ.msu.ru

financed by governments, even though such global threats as pandemics require donations, as well as further actions by all possible investors. According to the results, with the rapid development of digitalization, most initiatives are aimed at encouraging the spread of digital technologies. The findings of the research suggest implications for figuring out who may have a special interest in the financial aspect of the concept of global public goods.

Keywords: economic development, financing of public goods, global public goods, international affairs between Russia and China, international cooperation.

JEL: A110, F420, H410, O570.

Introduction

In the context of modern globalization, when it is difficult to find a national economy that is not integrated into the system of global economic relations, issues related to the concept of global public goods (GPGs) are becoming especially relevant. Who should produce GPGs and be responsible for their funding? Are GPGs really necessary and available to the entire population of the planet? What is the real aim of the countries that produce GPGs? What are the less developed countries that do not have access to individual GPGs deprived of? And how can the problem of uneven access and distribution of GPGs be solved? A number of issues related to the distribution of public goods in the global economy still remain in the focus of scientists' attention. New grounds for significant research in this area indicate that the reality is different from the scientific ideas. This paper focuses on the issue of GPGs and is based on the analysis of international relations between Russia and China. The goal is to find answers to the questions mentioned above by analyzing the policies of the two countries regarding the production, preservation and distribution of GPGs. The article also concentrates on the systematization of the steps taken by the governments of Russia and China in this direction in the context of the challenges of our time.

Why were Russia and China chosen for the comparative analysis? In recent years, the two countries have been cooperating quite closely, both politically and economically. The volume of their mutual trade and the impact on each other's economy is increasing, while at the same time, joint large-scale investment projects are being implemented in Russia and China. In general, despite some differences in economic potential, Russia and China are currently considered prominent players in the international arena. Their interaction progresses and becomes more and more complex. Their economic and political cooperation not only has an impact on the world economy, but also shapes the existing order in the global markets. That is why the issue of creating GPGs in the context of modern international relationships between Russia and China seems relevant.

In the course of the study, systemic and comparative approaches were used for a comparative analysis of the concepts of GPGs. The continuous sampling method, the analysis of scientific literature, and general scientific dialectical research methods were implemented to summarize the results obtained and expand the classification of GPGs. The study was conducted on the basis of publications of the World Bank, the Eurasian

Economic Commission, the Ministry of Science and Education of the Russian Federation, the Ministry of Economic Development of the Russian Federation, the Ministry of Foreign Affairs of the People's Republic of China, the Asian Forum in Boao, the Applied Consumer Center and the information support system (BeiDou Global Navigation Satellite System), the Chamber of Commerce and Industry of the Russian Federation, the China Internet Information Center, NewMark and Submarine Networks.

1. The concept of global public goods: New grounds

The concept of GPGs appeared relatively recently — at the turn of the 20th and 21st centuries, and it is no coincidence that the concept of “global public goods” cannot yet be considered well-established. It is interpreted in different and rather contradictory ways. The essence of the concept is that the benefit given to one person and one state can be extended to other countries without charging an additional fee (Block, 2004).

In general, it should be noted that the theory of GPGs is formed on the basis of the provisions of the public goods (PGs) theory developed by the classics of political economy and representatives of modern economic science. According to the American economists P. Samuelson and W. Nordhaus, goods whose benefits are inseparably distributed throughout society, regardless of whether or not certain persons want to consume these goods, are public. The authors do not focus their attention on the special features of PGs. In their opinion, any state's smallpox eradication measures are protective for all people, not just for those who pay for vaccination. The opposite of public goods is private goods, such as bread, which, if consumed by one person, cannot be consumed by another (Samuelson & Nordhaus, 1999). The main point in this approach is that a public good has a positive effect on the whole society and that everyone has equal access to the consumption of this good.

If some public good becomes available to other nations/states, there is reason to talk about its multinational, international or global character. Defining global benefits, I. Kaul, a professor at the Hertie School of Governance in Berlin and an adviser to many government organizations, notes that these are such benefits that can be described as follows: “GPGs are universally accessible, which includes not only geography but also across age generations and socio-economic groups” (Kaul et al., 1999). The author emphasizes that GPGs do not belong to a particular group of people or a particular country as they are equally distributed everywhere (including any political-geographical region) and do not infringe on the rights of individual segments of society.

Many economists point out the connection between the theories of PGs and GPGs. For example, the British researcher Desai pays special attention to the dependence of the financing of both GPGs and national public goods on the national state budget. He says that taxpayers of states must realize that global public goods are national public goods that became global, just the way goods that were traditionally external (like the atmosphere) became national in the sense that their sustainable regulation requires concerted action at the national level (Desai, 2003).

It should be noted that the history of views on the GPGs is only a few decades old. The term “global public goods” began to be discussed in Western literature only in the 1990s, and the concept of GPGs was subjected to detailed analysis only at the beginning of the 21st century. In 1999, the book “Global Public Goods: International Cooperation in the XXI Century” was published by German economists (Kaul et al., 1999), which became a starting point for further research and discussions in different political circles, at summits and congresses. The ambiguity and novelty of the idea was criticized by some countries, which led to the publication of two more significant works within the framework of the United Nations Development Program: “Providing Global Public Goods: Managing Globalization” (Desai, 2003) and “New Public Finance: Responding to Global Challenges” (Kaul & Conceicao, 2006), in which the concept was concretized and proposals for the development of the program were elaborated. In particular, new global issues requiring supranational solutions were identified, such as global financial stability and market efficiency, the risk of global climate change, biodiversity conservation, the fight against renewable and emerging infectious diseases, food safety, cybercrime and e-commerce, drug control and international terrorism, weapons of mass destruction, and others.

An important point in understanding global public goods was the study by a Franco-Swedish organization, which published the report “Responding to Global Challenges: International Task Force on Global Public Goods” (International Task Force..., 2006), which allows to systematize the existing views on the GPGs. Six types of GPGs were identified as key ones: preventing the emergence and spread of infectious diseases, combating climate change, maintaining international financial stability, strengthening the international trading system, achieving peace and security, and accumulating knowledge (Medvedev & Tomashov, 2009).

The approach of domestic researchers to the characteristics of GPGs is equally interesting. According to them, GPGs are determined based on an analysis of the scale of their distribution, as well as the scale of the impact of the benefits and damages they bring to different countries. According to the concept of Mukhamadieva, GPGs can be used by the entire population of the planet without any exception. At the same time, the harm and benefits from their use and production can be limitless (Mukhamadieva, 2013).

Negative effects of the consumption of GPGs at the global level can be characterized as global anti-good or global evil. In fact, access to GPGs, as well as the concentration and degree of danger of global social evil, are unevenly distributed among the countries of the world. Some countries have unrestricted access to GPGs, while others possess rather limited access. For instance, poor countries are rather often left without any access to GPGs and are prone to global social evils, including epidemics or international terrorism. This raises the problem of the need for assistance or even potential interference in the sovereign affairs of such countries by more developed ones. In addition, individual GPGs can be turned into clear evil for other countries (or generations) when it comes to decision-making. For example, this refers to actions related to achieving global peace and prosperity.

It can be assumed that the concept of GPGs is vague. A clear division between global and national public goods remains insufficiently defined in the scientific literature, and in practice, GPGs can become national, and vice versa. Such changes often occur under the influence of various foreign policy factors. This is mainly due to the fact that both public goods and global public goods are aimed at solving problems on a universal scale, maintaining controversial issues and protecting people. Moreover, both of them possess general characteristics of public goods and both have important distinctive properties (compared to economic goods) — non-exclusion from consumption and non-competitiveness in consumption. Such a unique characteristic as quasi-universality allows us to distinguish global goods from the national ones (Kaul et al., 1999). The latter characteristic emphasizes the scale of influence, including the availability of such goods for many countries, when virtually all of humanity consumes GPGs to a certain extent. At the same time, the uneven access to GPGs and the negative effects of their production for individual countries are becoming quite obvious. The degree of non-competitiveness in consumption, as well as the degree of detachment from consumption, can vary greatly for different GPGs. The number of beneficiaries also varies greatly for different categories of goods and depends on the political situation. As a result, less developed countries face either the problem of limited access to GPGs, or the problem of their negative consequences. This means that less developed countries depend on more developed ones regarding access to GPGs. Consequently, the issue of incomplete globality of GPGs is revealed, which means that GPGs are far from being global for everyone. All of the above leads to the problem of revising the concept of GPGs and finding a consensus among scientists in defining the concept itself.

Despite the rather contradictory views on the concept of GPGs, scientists from different countries are trying to understand all the subtleties of this concept and convince the world of its necessity. Summarizing the general and most significant features of the definitions discussed above, we can draw the following conclusion. GPGs are goods of a planetary scale that affect the world economy as a whole. GPGs are based on three principles (indivisibility, non-competitiveness, quasi-universality) and are provided on a common basis to all countries without infringing on national interests.

Recent global events indicate new challenges facing national economies. That is why there are new grounds for taking into consideration the concept of GPGs. The most significant among them are the transition to the digital economy and the consequences of the pandemic. According to domestic researchers, "...the COVID-19 pandemic consequences may lead to new approaches towards implementing and evaluating economic policies aimed at achieving the SDGs. Nowadays, humanity faces an unprecedented situation when almost all nations have sacrificed economic growth for the sake of saving human lives. That means that human lives have become an absolute priority." (Bobylev & Grigoryev, 2020). The response to the new challenges was the need for countries to work towards the successful creation and distribution of GPGs. This means taking into account national interests, as well as the obvious need to strengthen coordination of actions and participation in financing of GPGs.

The practice of creating GPGs worldwide suggests that countries with a high level of economic development are more successful in financing the process of creating GPGs, which is explained not only by the concentration of finances, but also by knowledge, information and technologies in advanced countries. Such an imbalance can lead to a distortion in the system of political decision-making and require public control. The researchers emphasize that the scale of funding in individual GPGs "...is determined in the course of political bargaining, which voters can influence by voting for a particular political party." (Medvedev & Tomashov, 2010). However, significant financial contributions do not always lead to the desired result. That is why countries that have succeeded in economic development are not in favor of providing assistance to countries with low levels of economic development or countries in crisis in producing GPGs.

In general, the problem of funding GPGs is not as simple as it may seem at first glance. On the one hand, their production is the responsibility of governments, since GPGs are public and the capabilities of each government are determined by the responsibility of taxpayers. On the other hand, GPGs are used by a number of countries, which implies the collective responsibility of states and supranational control over emerging problems. Therefore, in addition to the individual contribution of countries to the creation of GPGs, there is a need for joint projects. According to I. Kaul, "...similarly, there could be a need for pooling efforts internationally such as the creation and co-shared financing of a global fund to support poorer countries in meeting their international cooperation commitments." (Kaul, 2013). At the same time, the researcher identifies the following participants in the financing of GPGs: 1) governments; 2) intergovernmental organizations; 3) interest groups; 4) voluntary cross-border collective action (civil society organizations, global public-private partnerships); 5) households and firms. Since the contribution of each of the above-mentioned participants varies, there is a clear need for joint actions by governments aimed at identifying projects which primarily require financial support.

GPGs differ. According to the classification of German researchers, the following types of GPGs can be distinguished: natural (for example, forests, the world ocean, the Earth's atmosphere, etc.); "knowledge" and "information" (such GPGs include education, international law, systems of communication); political goods (for instance, financial stability, remedies and vaccines for epidemic diseases, world stability), etc. (Kaul et al., 1999). A problematic aspect of this classification is that many GPGs of a global nature cannot be attributed exclusively to one of the types mentioned above. In this regard, in our opinion, it is expedient to classify GPGs based on the "subject of funding" criterion, highlighting the types of GPGs that can be financed by economic agents of different levels. In accordance with this approach, the following classification can be given:

1. GPGs funded at the level of governments (allocation of budget funds for planned international initiatives and grants for innovative developments).
2. GPGs funded at the level of intergovernmental organizations (holding international forums to stimulate investment in the modernization of the world).
3. GPGs funded at the level of interest groups (targeted investments of business alliances).

4. GPGs funded at the level of voluntary cross-border collective action (including individual donations to support the non-profit sector).
5. GPGs funded at the household and firm level (individual donations from the funds of private companies and organizations).

This approach allows us to systematize the participation of different countries and economic agents in the creation of GPGs. For effective functioning in the field of GPGs funding, it is highly advisable to coordinate the activities of different countries at the supranational level, as well as to compile a list of the highest priority GPGs. This measure will allow a number of countries to become the most active participants in the process of funding in the future. The above-mentioned list should be created as part of the joint work of national governments and international organizations.

Taking into consideration all the above, the issue of GPGs is of particular relevance for less developed countries. For this reason, joining the efforts of some of them partially solves the problem of limited access to GPGs, as well as reduces the risks of negative effects.

2. Russia's role in producing global public goods

This section analyzes the contribution of the Russian Federation to preservation, production and distribution of GPGs.

To begin with, Russia plays a major role in preserving natural resources and sustaining the biosphere. These are considered GPGs as the entire human race lives in the environment and therefore benefits from its preservation.

According to a number of Russian researchers, Russia is considered an “ecological donor” for the biosphere (Bobilev & Goryacheva, 2019). There are several reasons for that. First of all, since the country has a vast territory (12% of the Earth's land area, any influence wielded on this territory affects the ecosystem of the entire planet (Steblyanskaya et al., 2021). Moreover, Russia has preserved the world's largest territory untouched by economic activity (60–65% of the country's total area), the largest forest area (22% of the global forest cover), marshlands and water-rich territories. All of this plays an indispensable role in maintaining the biosphere. Natural resources include oil (13%), iron ore (27%), gas (34%), coal (12%), etc. (Ecosystem Services of Russia, 2016). UN experts, however, too often note an insufficient level of compliance with environmental legislation in Russia (Steblyanskaya et al., 2021).

Nevertheless, the country's actions on producing and preserving other types of GPGs are characterized more positively. That is, Russia is pursuing an active policy within the framework of the Eurasian Economic Union (EAEU) and the Commonwealth of Independent States (CIS) aimed at forming common markets and a single economic space of the countries participating in the Eurasian integration process and eliminating trade barriers between them.¹

¹ https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/razvitie_evraziyskoy_integracii/

In accordance with the agreement establishing the framework of the European Economic Union (signed in Astana on 29.05.2014, as amended on 01.10.2019),² the main idea of the member states' economic policy is to provide the common good for all citizens of the member states, i.e. to create conditions for stable economic development of the member states in order to improve the living standards of their people. To this end, there is a desire to create a common market for goods, services, capital and labor within the EAEU. The current strategic directions of the member states' economic cooperation are determined by the decision of the Supreme Eurasian Economic Council No. 12 of December 11, 2020 "On strategic directions for the development of Eurasian economic integration until 2025."³ In particular, by 2025, it is planned to create a common electricity market that will ensure the free flow of electrical energy, free pricing and competition in the power industry within the EAEU.⁴ Moreover, in accordance with the adopted strategy, a number of other common markets should be formed by 2025, including 1) a common financial market of the EAEU countries, whose purpose is to create a single legal system regulating the banking, insurance and securities markets of the member states of the Union⁵; 2) a transport service market, including the implementation of a coordinated (agreed) transport policy of the Union member states in the field of road transport, unification of customs regulations and information base.⁶ In addition, an agenda for digital development was set, the first item of which is forming a regulatory framework for the implementation and launch of digital initiatives.⁷ Among the projects are the "Eurasian Network of Industrial Cooperation, Subcontracting and Technology Transfer" and the "Unified Search System "Work without Borders"".

It is also worth mentioning that under the current epidemiological situation, the Union is taking active measures to prevent the spread of the coronavirus COVID-19, as well as to overcome the economic difficulties that have consequently arisen.⁸ The latter includes creating a unified search form for employers and applicants. In other words, Russia and other countries of the Union strive to create conditions for the successful trade and economic development of both each of the participating countries and the entire association as a whole, thereby producing GPGs.

The role of Russia in the development of integration processes within the CIS is no less important. The key areas of interaction between the member countries are the following: digital development of society, creation of a regional digital space and

² http://www.consultant.ru/document/cons_doc_LAW_163855/

³ https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/razvitie_evraziyskoy_integracii/

⁴ <http://www.eurasiancommission.org/ru/nae/news/Pages/16-08-2019-2.aspx>

⁵ <http://www.eurasiancommission.org/ru/act/finpol/dofp/Pages/conception.aspx>

⁶ <http://www.eurasiancommission.org/ru/nae/news/Pages/25-08-2017-5.aspx>

⁷ <https://www.economy.gov.ru/material/file/66eec1250c653fc9abd0419604f44bbd/VED.pdf>

⁸ https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/razvitie_evraziyskoy_integracii/

information infrastructure, insuring information security. To stimulate the development of these areas, an interstate program aimed at developing innovative cooperation within the Union was launched in 2019. The program is designed for the period up to 2030 and its goal is to create a single digital business space.⁹ This procedure will allow to create single markets and expand the investment base for creating GPGs by attracting private investors.

It should also be noted that Russia is actively involved in cooperation with other countries. The main goals of these relations are trade, economic integration, development of the digital economy and the road transport system, exchange of scientific and technical achievements, and regulation of health systems, tourism, etc. For instance, in 2019, an agreement between the government of St. Petersburg and the Singapore Cooperation Enterprise Agency was signed in Vladivostok. The main purpose of the agreement was to create and launch a hardware and software complex “Unified Transport Model of St. Petersburg and the Leningrad Region” using an intelligent transport platform. Furthermore, an agreement was reached on the formation of an interdepartmental working group for the project eventually created in February 2020. In 2019, a number of agreements were reached with Japan aimed at solving the issues of climate change and increasing energy efficiency. That is to say, a memorandum was signed with the goal of reducing toxic emissions (June 28, 2019, Osaka). In addition, Russia cooperates with the OECD on the exchange of agricultural advances and participates in joint research in the field of economic development and education.

Joint projects are also being implemented with the Shanghai Cooperation Organization (SCO), APEC, ASEAN, BRICS, the Group of 20, and UN organizations.¹⁰

Within the framework of the SCO, for example, a program of multilateral trade and economic cooperation is being implemented aimed at creating a number of favorable conditions for trade of goods and services, developing the digital economy, technology parks and start-ups, and agriculture, as well as supporting and developing small and medium-sized businesses, etc. As an APEC member state, Russia is taking part in the development of a number of initiatives also aimed at maintaining economic growth in the countries of the region, strengthening mutual trade, eliminating restrictions on the movement of goods, services and capital between countries. Among the current APEC projects in which Russia takes an active part, the following can be noted: an initiative to bridge the gap in economic development and integration of remote territories for sustainable growth of the APEC region; an initiative to develop international interaction between innovative clusters and economic regions of APEC; and the study of APEC approaches to the regulation of new technologies.¹¹ Joint projects in the Russia-ASEAN Dialogue Partnership include seminars, conferences, financial and economic expertise and research, exchange of delegations, vocational training, and other activities to promote

⁹ <https://www.economy.gov.ru/material/file/66eec1250c653fc9abd0419604f44bbd/VED.pdf>

¹⁰ https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/

¹¹ https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/mnogostoronnee_ekonomicheskoe_sotrudnichestvo/ates/

cooperation between ASEAN and the Russian Federation in the economic, scientific, technical, trade, cultural and other spheres.¹²

In 2020, Russia also served as chairman of the BRICS association. On the economic track, the priority areas of the agenda were issues of overcoming the economic consequences of the pandemic, sustainable development, the multilateral trading system and investment facilitation, support for small and medium-sized enterprises, development of remote territories, and other initiatives. As a result of the meeting of the BRICS trade ministers (July 23, 2020), the following documents were adopted: Joint Communiqué of Ministers of Economy and Foreign Trade of the BRICS countries, Guidelines for Promoting Effective Participation of MSMEs in International Trade, BRICS Agreement on Investment Promotion; Joint Statement on Supporting the Multilateral Trading System and Reforming the WTO (Materials Of the Ministry of Economic Development of the Russian Federation, 2020).¹³

Therefore, as a member of various international unions, Russia is actively involved in the production, preservation and distribution of GPGs. The purpose of both the country's participation in such projects and the unions themselves is to create conditions for favorable economic development of each participating country.

3. Chinese view on the problem of providing global public goods

The Chinese government sees the problem of the production of GPGs in its own way and participates in their creation, pursuing certain economic interests. Over the past few decades, the People's Republic of China (PRC) has become a significant figure on the world stage not only in political and economic, but also in cultural and social aspects. As a result of its active position, China plays a leading role in shaping the global economic climate for mass production and subsequent export of goods and attracting investment, especially in the field of GPGs (new technologies, educational programs, etc.).

Having achieved enormous success in economic development, China is actively opening up to the world and exerts more and more influence on the distribution and production of GPGs, investing in high-tech projects.

One example is the BeiDou Navigation Satellite System that was launched back in 1994. The launch of BeiDou-2 in 2004 made it possible to provide users in the Asia-Pacific region with services for sending short messages and determining location, speed, and time. Due to the prospects of the project, in 2014, China invested \$ 810 million in the development of the navigation system alone, which allowed the development of improved models. Thus, in 2017, the Chinese and American sides signed an agreement on the

¹² https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/mnogostoronnee_ekonomicheskoe_sotrudnichestvo/dialogovoe_partnerstvo_rossiya_asean/

¹³ https://www.economy.gov.ru/material/directions/vneshneekonomicheskaya_deyatelnost/mnogostoronnee_ekonomicheskoe_sotrudnichestvo/briks/

compatibility and complementarity of the BeiDou and GPS systems. Moreover, in 2018, the governments of the Russian Federation and China also announced the conclusion of a partnership agreement on the use of global navigation satellite systems Glonass and BeiDou for peaceful purposes.¹⁴ At the same time, it is reported that cooperation between Glonass and BeiDou covers the entire surface of the earth, which allows all political and geographical regions to use this system equally. According to Liu He, Vice Premier of the State Council of China, "...this is an important contribution of the Chinese people to the development of the whole world," which confirms the readiness of the PRC to share benefits with the rest of the planet.¹⁵

In addition to this initiative, the largest cable system with a length of 25,000 km was created, connecting Southeast Asia with Europe — Asia-Africa-Europe 1 (AAE-1).¹⁶ It connects Hong Kong, Vietnam, Cambodia and Thailand with Malaysia and Singapore, and then with Myanmar, India, Pakistan, Oman, UAE, Qatar, Yemen, Djibouti, Saudi Arabia, Egypt, Greece, Italy and France. The AAE-1 system uses the most advanced 100 Gbps data transmission technology, with a minimum design capacity of 40 Tbps. This cable helps to connect the listed countries without long delays. Thanks to this initiative, more than 20 countries receive high-speed global intercontinental electronic communications traffic. The financing of this program is mainly the merit of initiative groups. In addition, there are private investments from various funds and technical groups, for example, China Unicom, PCCW, TOT, and others participate in the funding.

One of the most important directions for providing GPGs in China is the project "One Belt One Road" (*Ch.* 一带一路). The project was proposed in 2013 by Chinese President Xi Jinping during a visit to Kazakhstan as a merger of two important world programs: "Silk Road Economic Belt" and "21st Century Maritime Silk Road." This initiative is aimed at implementing international partnerships, expanding and strengthening multilateral structures with the direct assistance of the Chinese side. It is worth saying that, first of all, this program is based on the values and spirit of the Great Silk Road — the main road that used to connect East and West. Like in ancient times, it is intended to stimulate the economic and cultural development of cooperating states, improve the mechanisms of territorial partnerships, expand relations between different civilizations and strengthen peaceful coexistence in every possible way. In addition, China actively promotes the implementation of international climate management measures, takes the lead in international development in the field of innovation, and contributes to the implementation of the concepts of security and justice in the international arena.¹⁷

As a result of this initiative, the following projects were launched:

- 1) Asian Infrastructure Investment Bank (AIIB) — an international financial institution (supports the construction of infrastructure that stimulates the process of economic globalization in Asia);

¹⁴ <http://ppcmnic.ru/gnss/beidou>

¹⁵ <https://www.tadviser.ru/index.php/%D0%A1%D1%82%D0%B0%D1%82%D1%8C%D1%8F:BeiDou>

¹⁶ <https://www.submarinenetworks.com/systems/asia-europe-africa/aae-1>

¹⁷ http://russian.china.org.cn/exclusive/txt/2017-04/13/content_40611046.htm

- 2) University Alliance of the New Silk Road (supports openness and international mutual assistance in the field of higher education);
- 3) Strategic Union of Higher Education Institutions of the “One Belt One Road,” which includes 8 foreign and 39 national universities (it is called an international “think tank”);
- 4) Tourist Union of Cities of “One Belt One Road”;
- 5) Mombasa–Nairobi railway, connecting previously off-road regions.

This program makes joint discussion, construction and use of goods a priority, which not only significantly increases China’s rating on the world political and economic arena, but also pushes international cooperation to new levels of interaction.

The initiative is financed in different ways. The main one is the Silk Road Fund. The PRC government invested \$40 billion in its authorized capital. As of 2018, its legal capital amounted to 100 billion yuan (\$15.4 billion). Subsidies are also provided by strategic and state banks, state funds, as well as bonds and private capital investments.¹⁸ This means that not only the state, but also private investors are interested in the development of this initiative, which indicates a high motivation for the modernization of the world at all levels.

Speaking about the interest of the PRC in launching such large-scale projects, it is important to understand the conditions for the participation of other countries and the true goals of the main investor. They are often explained by the expansion of access to resources and markets, and the desire to increase the employment of its population. In June 2021, on the first day of the Primakov Readings International Forum, a question was raised: Does China need global world leadership? Chairman of the Center for International Security and Strategy of Tsinghua University Fu Ying said that world leadership existed, and its main task was to “fight world chaos and maintain order in the world.” It was added that many countries were aware of the US hegemony after World War II and its weakening these days. But the PRC has already “achieved very serious economic progress, and therefore China expects that it will play a more important role in the world.”¹⁹

Another equally important program is the Boao Forum for Asia (BFA), a non-governmental and non-profit international organization established in 2001 on the initiative of the Chinese side to create a discussion platform for Asia, where a wide range of issues related to the development of the world economy and the global political system are discussed.²⁰

The Boao Forum for Asia discusses not only current economic, social, environmental and other issues, but also the development of reforms and initiatives, such as “One Belt One Road.” The last time the online forum was held in April 2021, and its main task was to strengthen mutual understanding in the post-pandemic era, create additional incentives for universal socio-economic growth and effective global governance,²¹ therefore offering the world new knowledge in overcoming the general crisis even during the pandemic.

¹⁸ <https://newmarkfinance.com/bri>

¹⁹ <https://wtcmoscow.ru/company/news/996/#>

²⁰ https://tpprf.ru/ru/vneshnie-svyazy/bilateral_cooperation/boao/#

²¹ <https://tass.ru/ekonomika/10811163>

Despite China's significant dominance in the political and economic arenas in the Asian region, China is also interested in creating programs and proposals aimed at improving the climate situation in the world. Thus, according to the World Bank, the world welfare organization including 189 states, China has committed itself to reduce carbon intensity by 40–45% by 2020, compared to the level of 2005, and to increase the share of energy produced from non-fossil fuels to 15% and partly did it,²² which currently puts the state in the first place in the world for the development of hydro and wind energy. The PRC has showed an ardent readiness to introduce environmentally friendly technologies that can bring production to a completely new level without harming nature and reduce the temperature in the world by 1.5 degrees by 2050. It is known that the coal industry causes irreparable damage to the environment, therefore, in order to reduce negative consequences, the work of several coal stations was suspended. In addition, Xi Jinping, General Secretary of the Central Committee of the Communist Party, said that in the next 40 years, starting from 2021, \$16 trillion in investment would be attracted for the development of clean technologies, which would entail restructuring of some economic foundations (Udemans, 2021). However, the PRC is ready to take such a step to provide another global good.

Indeed, in recent years, China has taken an active position in international partnerships to create global public goods that establish some basis for a healthy future. As stated on the website of the Ministry of Foreign Affairs of the People's Republic of China, the state with all seriousness and understanding of responsibility supports the development of equality and mutual benefit in international cooperation, a harmonious community of different cultures, respect and diversity of all forms of goods that contribute to the holistic modernization of human society (Zhaoxing, 2005).

Comparing the approaches of the two countries to the creation and preservation of GPGs, it can be noted that the Chinese position on providing GPGs is more focused on technological change of the established processes, the improvement of which will lead to positive changes in the environment.

4. Collaborative effort as a response to limited access

The problem of GPGs consumption is complicated by differences in the ability of countries to participate on an equal footing in the process of their creation, an ambiguous positive assessment of certain goods and, partly, the unpreparedness of less developed countries to consume them. In this regard, the joint experience of Russia and China in producing GPGs is interesting and allows many less developed economies to receive positive externalities that create the basis for sustainable development.

As for cooperation between Russia and China, their interaction goes back 400 years. During this time, their relations have come a long way from periods of territorial conflicts and ideological differences to cooperation. In 2019, while congratulating Xi Jinping on

²² <https://www.vsemirnyjbank.org/ru/news/opinion/2013/09>

the 70th anniversary of the establishment of diplomatic relations between Russia and China, Russian President Vladimir Putin noted that the Russian-Chinese relations had stood the test of time.²³

In 2021, despite certain differences in national interests, economic potentials and cultural peculiarities, Moscow and Beijing are reaching new heights in relations. It is worth noting, for example, that the “RC-Investments” Fund became a part of the Russian-Chinese Business Council. This merger contributes to the consolidation of Russian-Chinese trade and economic relations and, in particular, helps joint investment projects.²⁴ Russian-Chinese cooperation covers numerous spheres of public life: trade, science, culture, education, finance, the military complex, international treaties, etc. A significant amount of interaction between Russia and China is associated with the production of GPGs. An analysis of the joint policy brief of the Russian International Affairs Council and the Chinese Academy of Social Sciences allows us to identify the main directions of this cooperation.²⁵

Firstly, mention should be made of the Russian-Chinese cooperation in the fight against COVID-19, which largely determined the state policies of the countries in 2020–2021. At the beginning of the pandemic, Russia sent humanitarian aid to China (medical masks, gloves and protective clothing), as well as qualified medical experts. In response, China sent humanitarian aid to Russia. During a joint press conference with Foreign Minister Sergey Lavrov, Wang Yi, Foreign Minister of the People’s Republic of China, urged the world to make vaccines against COVID-19 a global public good. Sergey Lavrov also noted that cooperation between Russia and China continued, including in the field of production and distribution of vaccines.²⁶

It is also worth saying that the PRC timely informed the World Health Organization about the existence and evolution of COVID-19, which helped prepare medical institutions for the imminent danger. At the same time, the Chinese public administration of all levels spent more than \$10 billion to fight the infection (the Central Government provided approximately \$2 billion).²⁷ Partly owing to China’s warning, the Russian government allocated 1.4 trillion rubles in advance at the beginning of the pandemic (01.04.2020) to combat COVID-19 (Chevtaeva, 2020).

In addition, it is not only the ruling structures that are fighting against COVID-19. Wealthy residents of China and their companies donated large sums of money to fight the pandemic. For example, the game developer NetEase allocated about \$14 million; the online store Pinduoduo and the social network Kuaishou donated the same amount of money. The online retailer Meituan-Dianping donated \$ 31 million, the search engine

²³ <https://ria.ru/20191002/1559344828.html>

²⁴ https://www.vedomosti.ru/press_releases/2021/06/28/investitsionnaya-platforma-fonda-roskongress--fond-rk-investitsii--voshla-v-sostav-rossiisko-kitaiskogo-delovogo-soveta

²⁵ <https://russiancouncil.ru/papers/Russia-China-Strategic-PolicyBrief28.pdf>

²⁶ <https://bigasia.ru/content/news/society/kitay-i-rossiya-prizyvayut-mir-sdelat-vaktsiny-obshchestvennym-blagom/>

²⁷ <https://amp.rbc.ru/rbcnews/politics/18/05/2020/5ec267749a79476bbd9af43d>

Baidu — \$46.5 million. In total, 800 Chinese companies donated about \$1.8 billion (Korepanova, 2020). As for the Russian Federation, there are also patrons willing to share their companies' funds and personal assets to fight the pandemic. Norrnickel, for example, confirmed working with local authorities in the regions to improve the coronavirus situation. More than 200 million rubles were allocated for the purchase of medical devices and medicines. The Alfa Group Consortium reported that it was ready to donate 1 billion rubles to combat the spread of COVID-19 in Russia. We can say that the global catastrophe united all segments of the population to create a new GPG in the form of a vaccine.

Secondly, Russia and China seek to promote their values from the rostrums of international organizations, including BRICS and SCO, which are of priority to them. These values include the inadmissibility of interference in the internal affairs of other countries, respect for the basic norms of international law, and the importance of maintaining the primacy of the UN in international affairs. Thus, they once again emphasize the importance of developing the concept of GPGs within the framework of political interactions between countries.

Thirdly, a special area of interaction is education and intercultural exchange. For instance, in 2019, the volume of student exchange between Russia and China exceeded 90 thousand people.²⁸ And in 2014, MSU-BIT, the first joint Russian-Chinese university, was established in Shenzhen.²⁹

It is worth mentioning that both sides spend significant sums from their budgets, as they believe that education, including the opportunity of obtaining scholarship experience, is one of the main GPGs. According to the latest data, China annually allocates at least \$451.9 billion for research and development, ranking second in the world in 2016. Russia also supports scientific activity in the country, providing the world with valuable personnel and implementing joint programs (Analytical Center for the Government of the Russian Federation, 2018). Both countries are doing their best to promote the development of the education system.

As regards scientific initiatives, special attention should be paid to the Russian-Chinese cross years that strengthen cooperation and mutual trust between the two countries. The years 2020 and 2021 were declared the Years of Scientific, Technical and Innovative Cooperation between the Russian Federation and the People's Republic of China. Within the framework of this initiative, a consistent plan was adopted. It includes a large number of activities that can propel science and technology to a new level. Great attention is paid to nature protection and development of renewable energy sources. For example, one of the upcoming events, which is scheduled for the end of September 2021 and will be held at Kosygin Russian State University, is the symposium "Improving energy and resource efficiency and environmental safety of processes and devices in the chemical and related industries" dedicated to the 110th anniversary of A.N. Planovsky. Moreover, in 2020–2021, it is planned to conduct joint research in the

²⁸ <https://ria.ru/20190916/1558731168.html>

²⁹ <https://www.msu.ru/info/struct/dep/universitet-mgu-ppi-v-shenzhene.php>

field of the quality of artificial human habitat and conservation of resources and energy in the process of using construction facilities and infrastructure of populated areas. It is also scheduled to conduct joint studies of Arctic climatic resources, to solve problems of ecology and digital and intellectual agrotechnologies, and to create international committees in the field of agricultural plant breeding. Furthermore, it is planned to have meetings to solve the problems of seismically active areas of the planet and to conduct expeditions to the Russian and Chinese forests in order to study and preserve the flora and fauna of these areas.³⁰

However, it should be noted that these countries have shown mutual interest in environmental protection not only in recent years, but also several decades ago. The main document streamlining environmental relations between the PRC and the Russian Federation is the “Agreement between the Government of the Russian Federation and the Government of the People’s Republic of China in the Field of Environmental Protection,” which was initiated and signed in Beijing in 1994. This is the most general of all the subsequent regulatory business papers. Later, more agreements were signed: “Agreement Between the Government Of the Russian Federation and the Government of the People’s Republic of China on the Joint Protection of Forests from Fires” was signed in 1995; “Agreement between the Government of the Russian Federation and the Government of the People’s Republic of China on Cooperation in the Joint Development of Forest Resources” and “Agreement Between the Ministry of Natural Resources of the Russian Federation and the Ministry of Land and Natural Resources of the People’s Republic of China on Cooperation in the Field of Geology and the Use of Subterranean Depth” — in 2000; “Agreement Between the Government of the Russian Federation and the Government of the People’s Republic of China on Cooperation in the Exploration and Use of the World Ocean” — in 2003.³¹ Naturally, these documents are not the only ones in the field of nature protection. However, they mark the beginning of modern relations between Russia and China in this area of international cooperation.

Admittedly, despite all the efforts of the governments of both countries, there are many gaps and problems in the environmental legislation of both the Russian Federation and the PRC. However, ongoing initiatives still contribute to the idea of globalization of public goods and improving the quality of life of mankind.

These data are only a small part of the policy of the two countries in this direction. Nevertheless, based on the analysis, we see that both Russia and China play a significant role in the production, preservation and distribution of various types of GPGs. The table below summarizes the Russian and Chinese projects mentioned above, as well as their joint actions for each of the GPG types within the framework of the proposed classification (Table 1).

³⁰ <https://minobrnauki.gov.ru/upload/iblock/f65/f65b5dde86f146d4a55b47a09e4a5d1.pdf>

³¹ <http://oldsite.zapoved.ru/activities/list.php?part=146>

Table 1. Classification of GPGs depending on the source of funding in Russia and China

| Level at which a GPG is created | Russia | China | Joint projects |
|--|---|--|---|
| Governments | Donor of the world biosphere | Plan to reduce carbon dioxide intensity (by 2021) | GLONASS, BeiDou (2018) |
| | Agreements with Japan (combating climate change and increasing energy efficiency) | Increasing the share of energy produced from non-fossil fuels (2020) | Promotion (including within the BRICS and SCO) of the idea of the inadmissibility of interference in the internal affairs of other countries and respect for the basic norms of international law |
| | Memorandum on emission reduction (2019) | BeiDou satellite system (BDS) (1994/2000 — first launch) | Agreement between the government of the Russian Federation and the government of the PRC in the field of environmental protection (Beijing, May 27, 1994) |
| | Projects in the field of innovation (“Eurasian network of industrial cooperation, subcontracting and technology transfer”) | AAE-1 — Asia-Africa-Europe I (2011) | Agreement between the government of the Russian Federation and the government of the PRC on joint protection of forests from fires (Moscow, June 26, 1995) |
| | Cooperation program within the framework of the problem of information security | BFA — Boao Forum for Asia (2001) | Joint research of Arctic climatic resources, solving problems of ecology and digital, intelligent agricultural technologies (2020, 2021) |
| | Agreement between the Government of St. Petersburg and the Singapore Cooperation. The main purpose of the agreement was to create and launch a hardware and software complex “Unified Transport Model of St. Petersburg and the Leningrad Region” | - | Joint expeditions to the forests of Russia and China in order to study and preserve the flora and fauna of these areas (2020, 2021) |
| | Exchange of results of agricultural achievements | - | Cooperation in the fight against the coronavirus infection (2020, 2021) |

Table 1. Continued

| Level at which a GPG is created | Russia | China | Joint projects |
|--|---|--|---|
| | Joint research in the area of economic development and education | - | - |
| | Creation of a system of single markets. | - | - |
| | Elimination of barriers in the spheres of trade and economy within the framework of the Eurasian Economic Union (EAEU) and the Commonwealth of Independent States (CIS) | | |
| Intergovernmental organizations | Norilsk Nickel and Alfa Group allocated 1.2 billion rubles. to combat the spread of coronavirus (2020) | BFA functions as a non-governmental and non-profit association | MSU-BIT in Shenzhen (SMBU) (established in 2014) |
| | - | - | Cross-years between Russia and China (2020, 2021) |
| Voluntary cross-border collective action | V. Potanin donated 1 billion rubles to support the non-profit sector of the Russian economy (2020) | - | - |
| Households and firms | The Investment Promotion Fund "RK-Investments" became a part of the RCBC (2021) | Wealthy residents of China and their companies donated huge sums of money to overcome the COVID-19 pandemic (2020) | - |

Source: compiled by the authors.

Conclusion

Today, the relevance of the GPGs concept is confirmed by new grounds caused by the transition to the digital economy and the COVID-19 pandemic. The latter has hindered economic development of many countries. New challenges exacerbate the problem of ambiguity and inconsistency of GPGs and put forward the necessity of reconsidering this concept by paying closer attention to their production, distribution and preservation.

Comparing the concepts of GPGs in Russia and China, as well as the policies pursued by both countries in this regard, it can be concluded that Russia and China are actively involved in the production and distribution of GPGs of all types, both at the individual and joint levels. Both Russia and China take the position of “global donors.” As participants of international projects, both countries are ready to share their experience and strategies of development on a global scale. At the same time, the Chinese position is distinguished by its focus on technological changes in existing spheres of development, improvement in which leads to positive changes in the environment.

Funding of initiatives both in Russia and in China occurs mainly at the state level, since the government is responsible for the main financing of GPGs. At the same time, when a global catastrophe occurs, more and more initiative groups and ordinary citizens are ready to provide financial support, as well as to come up with their own solutions and initiatives.

Joint projects of the two countries make it possible to successfully implement the creation of GPGs in different directions, mitigating the problem of providing GPGs for countries with less developed economies. In general, the joint contribution of Russia and China to the production of GPGs necessary for humanity allows many less developed economies to receive positive externalities and creates a basis for sustainable development of many countries.

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