

## Implementing SDG's in BRICS Nations: Challenges, Opportunities and Recommendations

Kulvir Kaur<sup>1\*</sup> | Arief Hussian Ganaie<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Political Science, CT University, Ludhiana (Punjab) India.

<sup>2</sup>Assistant Professor, Department of Political Science, CT University, Ludhiana (Punjab) India.

\*Corresponding Author: profkulvirkaur@gmail.com

DOI: 10.62823/IJEMMASSS/7.2(II).7698

### ABSTRACT

*A strong alliance of developing economies with considerable sway over global governance are the BRICS countries (Brazil, Russia, India, China, and South Africa). The contribution of BRICS to the UN 2030 Agenda for Sustainable Development is examined in this study. These countries collectively make up around 40% of the world's population, more than 25% of its GDP, and a sizeable portion of its resources, making them vital players in the pursuit of the Sustainable Development Goals (SDGs). The study examines how the BRICS countries are working together to address global issues including inequality, poverty alleviation, climate change, and sustainable economic growth. It emphasises programs like the New Development Bank (NDB), which provides funding for sustainable development and infrastructure projects, as well as cooperative efforts in food security, renewable energy, and technological innovation. The report also explores the difficulties that the BRICS countries confront, such as divergent national agendas, socioeconomic divides, and geopolitical conflicts that impede coordinated action. This study examines how BRICS might enhance its position as a global sustainability champion by examining policy frameworks, case studies, and multilateral activities. It ends with suggestions for strengthening collaboration within the BRICS and cultivating alliances with other developing countries in order to successfully implement the 2030 Agenda.*

**Keywords:** BRICS, Sustainable Development, 2030 Agenda, Sustainable Development Goals (SDGs), Poverty Reduction, Renewable Energy, New Development Bank (NDB), Economic Disparities, South-South Cooperation, Technology and Innovation, Infrastructure Development, Geopolitical Tensions, Environmental Sustainability, Multilateralism, Emerging Economies.

### Introduction

Brazil, Russia, India, China, and South Africa make up the BRICS alliance, which has gradually become a powerful influence in world politics and the economy. The organisation was established primarily to address shared problems and advance economic cooperation, but it has now broadened its objectives to encompass sustainable development. This addition aligns with the widely adopted United Nations 2030 Agenda for Sustainable Development, which outlines 17 SDGs aimed at addressing pressing global concerns such as poverty, inequality, economic development, and climate change (United Nations, 2015).

The coalition's ability to make a significant contribution to the global sustainability agenda is strengthened by the diversity of its membership, which includes both established and emerging economies. The BRICS countries may lead efforts to promote sustainable development in their regions and around the world by utilising their combined resources, technical innovations, and policy frameworks. The BRICS's efforts to combine social inclusion, environmental preservation, and economic growth demonstrate their emphasis on sustainable development. This dedication is demonstrated by the New Development Bank (NDB), which was founded by the BRICS countries. Infrastructure and sustainable development initiatives in member nations and abroad are specifically supported by the NDB's mandate (NDB 2021).

The bank has aided in the advancement of SDG targets through investments in green technologies, urban infrastructure, and renewable energy, especially in sectors pertaining to clean energy (SDG 7), sustainable cities (SDG 11), and climate action (SDG 13). The coalition's understanding of the connection between environmental sustainability and economic growth is reflected in these efforts. Furthermore, the BRICS countries' shared position on climate change demonstrates their dedication to global sustainability. The BRICS nations have continuously pushed for fair and distinct duties at international fora like the Conference of the Parties (COP) and the United Nations Framework Convention on Climate Change (UNFCCC). This strategy emphasises the need for equitable participation in climate action while acknowledging the past contributions of industrialised nations to greenhouse gas emissions. For example, China's vow to peak carbon emissions before 2030 and India's commitment to achieve net-zero carbon emissions by 2070 demonstrate both individual and group efforts in line with SDG 13 (IEA 2021).

Similarly, BRICS's adherence to sustainable development ideals is further demonstrated by South Africa's progress in the renewable energy transition and Brazil's efforts to stop deforestation in the Amazon. The partnership has an impact on social and economic aspects of SDGs in addition to environmental sustainability. BRICS' diverse approach to sustainable development is demonstrated by initiatives aimed at gender equality (SDG 5), excellent education (SDG 4), and poverty reduction (SDG 1). For example, BRICS alliances and educational exchange programs promote knowledge sharing and capacity building, which helps ensure that all students have equal access to education.

The socioeconomic circumstances of member states have also improved as a result of initiatives to advance gender-inclusive policies and economic empowerment initiatives. In addition to demonstrating BRICS's dedication to the SDGs, these activities highlight the coalition's capacity to shape international policy discussions on sustainable development. However, there are issues with how well BRICS accomplish development goals. Consensus on some topics may be hampered by differences in member nations' political structures, economic priorities, and developmental stages. Significant challenges are also presented by outside variables like economic upheavals and geopolitical conflicts. Notwithstanding these difficulties, the coalition's tenacity and applicability are demonstrated by its capacity to manage intricate international dynamics and promote cooperation among various parties.

### **Navigating Global Goals: Brics and the 2030 Agenda**

#### **Institutional Mechanisms and Initiatives**

- **New Development Bank (NDB)**

The New Development Bank (NDB) is a key component of the institutional initiatives of the BRICS. Since its establishment in 2014, the NDB has provided funding for numerous initiatives focused on renewable energy, sustainable infrastructure, and technological development both within and outside of its member states. The NDB is a prime example of BRICS' dedication to advancing the global sustainability agenda by coordinating its programs with SDG aims.

The BRICS' New Development Bank (NDB) offers a distinct approach to global governance and stands out for its dedication to equity, sustainable development, green bonds, and speed (Cooper, 2017). As a new international development bank, the New Development Bank (NDB) has gotten off to a strong start; but, scaling up and overcoming present obstacles will determine its potential influence on global development finance (Hofman and Srinivas, 2024).

- **Renewable Energy Collaboration**

BRICS nations have launched collaborative initiatives to promote renewable energy. India's International Solar Alliance and China's leadership in solar manufacturing are complemented by Brazil's bioenergy expertise. These efforts aim to accelerate the transition from fossil fuels to clean energy sources, contributing to SDG 7 (Affordable and Clean Energy).

The BRICS' approach to renewable energy cooperation in Africa shows promise, with China and India being key drivers, but a specific strategy is needed to advance energy access, equity, and poverty reduction (Gu, Renwick and Xue, 2018).

Pathak and Shah (2019) argues that BRICS countries can contribute significantly to global renewable capacity by redefining their energy policies and addressing their unique needs.

Renewable energy use in BRICS countries contributes to economic growth and reduces CO2 emissions, with a bi-directional relationship between renewable energy and GDP growth (Fu et al., 2021).

- **Food Security and Agricultural Sustainability**

Brazil's advancements in sustainable agriculture, South Africa's innovations in agritech, and collective investments in food security align with SDG 2 (Zero Hunger). BRICS' emphasis on agricultural research and knowledge-sharing fosters resilience in food systems, particularly in developing nations.

Energy shortages and inadequate water resources impair food security in BRICS countries, while economic growth amplifies energy demand and environmental degradation (Ozturk, 2015).

The BRICS countries are emerging as key sites for agricultural commodity production, distribution, circulation, and consumption, contributing to major shifts in regional and global agro-food systems. Cousins et al., 2018)

BRICS countries' food security cooperation should focus on scientific and technological cooperation, information sharing, complementary advantages in trade, and improving global competitiveness of products to enhance global food security (Ren et al., 2020).

### **Policy Frameworks and Collaboration**

- **Climate Change Mitigation**

BRICS nations are pivotal to global climate action due to their significant carbon footprints and renewable energy potential. Joint commitments, such as the Paris Agreement, demonstrate their intent to contribute meaningfully to SDG 13 (Climate Action).

Gladun and Ahsan (2016) stated that BRICS countries can lead in climate change mitigation by fostering cooperation, developing a legal framework, and promoting renewable energy cooperation

The BRICS countries' Forestry Sector has a leading role in climate mitigation, with potential for further south-south cooperation and knowledge sharing to innovate and access climate finance instruments. (Bhan et al., 2017).

According to Sakharov (2024) BRICS countries have made progress in achieving the climate and environmental goals of Agenda 2030, but need to continue to work together to achieve greater progress.

- **Socio-economic Development**

Programs addressing inequality (SDG 10) and poverty alleviation (SDG 1) have been implemented, albeit with varying degrees of success. China's poverty eradication model and India's rural employment schemes provide case studies of scalable solutions.

BRICS countries' economic and legal cooperation focuses on agriculture, digital economy, energy, environment, education, health, finances, labor and employment, infrastructure, transportation, and trade (Shaidullina and Semenovskiy, 2022).

The BRICS Economic Partnership Strategy 2025 offers a positive, adapted, and clear economic agenda for expanding cooperation in the fight against large multinational corporations violating competition rules and dominating the world market (Dzhabiev, 2022).

### **Challenges in Brics' Collaboration**

BRICS collaboration faces challenges such as divergent national priorities, language barriers, financial commitments, and inadequate regulatory frameworks, while opportunities exist in enhancing research collaboration, economic integration, and science and technology cooperation.

- **Divergent National Priorities**

Economic disparities and political systems among BRICS nations create differences in their approach to SDGs. For example, while China and India prioritize industrial growth, South Africa's focus remains on addressing high unemployment and inequality. According to Rensburg et al., (2015, 2016) the BRICS nations face both challenges and opportunities in their research collaboration efforts. Key challenges include language barriers, financial commitments, inadequate regulatory frameworks, and divergent national interests.

- **Geopolitical Tensions**

Geopolitical conflicts, including border disputes and trade rivalries, affect intra-BRICS trust and collaboration. These tensions can derail joint initiatives aimed at achieving the SDGs. BRICS members successfully amplify converging interests while avoiding friction from disagreement by downplaying geopolitical divergence and policy competition, fostering informal cooperation in global governance

(Cooper and Farooq, 2013). The BRICS' geopolitical play will be defeated by its own tactical ploys unless the five emerging powers agree on a coherent strategy to harness their relative strengths (Brütsch and Papa, 2013). Despite these efforts, geopolitical tensions, particularly the India-China conflict in 2020, have raised questions about the group's future. Nevertheless, the BRICS group remains resilient, facing strategic, geopolitical, and operational challenges that will define its trajectory and impact on global governance (Papa & Verma, 2021). According to Nuruzzaman (2022) BRICS's effectiveness as an economic grouping is threatened by China-India rivalry and lack of liberal institutional geoeconomic strategies, requiring institutional reforms and coordinated policy approaches.

- **Socio-economic Disparities**

Wide socio-economic gaps within and between member states limit the uniform implementation of sustainable development policies. Addressing these disparities is essential for cohesive action. BRICS countries' rapid growth faces challenges like regional disparities, inequalities, unemployment, and poverty, suggesting they should focus on sustainable development rather than replicating advanced capitalism (Jha and Chakraborty, 2013). According to Králíková, (2014) common issues among BRICS countries include high social inequality, corruption, and challenges in education and the environment. The New Development Bank and improved coordination of joint actions have the potential to address these problems and enhance the sustainability of their economies. However, the partnership is based on mutual interests rather than shared values, raising questions about its long-term viability. The group exhibits visible socioeconomic disparities, with China showing remarkable improvement, followed by India, while South Africa struggles (Rout & Mallick, 2024).

#### **Opportunities for Enhanced BRICS Collaboration**

BRICS collaboration and strengthening institutional capacity can be achieved through increased research collaboration, economic cooperation, technology transfer, and the establishment of new financial institutions, despite challenges such as language barriers, financial commitments, and geopolitical tensions.

- **Strengthening Institutional Capacity**

Expanding the scope and influence of the NDB to include more SDG-specific projects can bolster BRICS' impact. Enhancing transparency and accountability in its operations will further legitimize its role. BRICS countries are undergoing rapid economic growth and technological change, necessitating stronger institutional capacity to address various emerging issues. (Hyder and Vecino-Ortiz, 2014). BRICS countries are advancing health cooperation, focusing on public health, healthcare systems, and biomedical sciences, contributing to global health improvements and fostering change in the region (Silva et al., 2014). By strengthening intra-institutional cooperation and interacting with international organizations, BRICS aims to enhance its role in global governance and improve the efficiency of the global governance architecture. The BRICS group engages with international institutions through "catalytic engagement" and "parallel treatment" approaches, establishing its own financial institutions and consultation mechanisms to coordinate national positions (Shelepov, 2018). The BRICS' capacity to transform the global financial order through collective institutional innovation depends on the strength of their common social purpose and the degree of structural power of established authorities (Helleiner and Wang, 2018).

- **Technology and Innovation**

Investing in joint R&D projects can harness the technological capabilities of BRICS nations. For instance, artificial intelligence and biotechnology can address pressing issues like health care (SDG 3) and education (SDG 4). The BRICS nations (Brazil, Russia, India, China, and South Africa) have committed to enhancing collaboration in science, technology, and innovation (STI) to address global challenges and boost economic growth (Kahn, 2015; Rensburg et al., 2015). Key areas of cooperation include climate change, water resources, geospatial technology, renewable energy, and astronomy (Kahn, 2015). According to Chernikov (2021) the BRICS Network University can serve as an educational platform for innovative cooperation, enhancing traditional mobility and general innovation exchange among participating countries. BRICS countries have seen positive economic growth due to AI implementation, particularly in China and India, with China becoming a leading AI country and India becoming a world leader in generative AI (Pitukhina et al., 2024).

- **Global Partnerships**

BRICS countries present significant opportunities for enhancing global partnerships and South-South cooperation, particularly in economic development and education. According to Mathur (2014) South-South and triangular cooperation, driven by stronger relationships among developing countries, is a powerful framework for trade, investment, and finance, as well as exchanges of relevant, cost-efficient, and innovative development solutions. South-South and triangular cooperation are highlighted as crucial models for implementing the post-2015 development agenda, with BRICS playing a pivotal role in knowledge transfer and capacity-building efforts (Sakurai, 2015). In education, multilateral collaboration through projects like the BRICS Network University is seen as more relevant to South-South cooperation than excellence programs focused on world-class universities (Khomyakov, 2018). The BRICS Plus format has emerged as a catalyst for expansion, potentially enhancing BRICS' position in global governance and among the Global South (Lissovolik, 2023). The BRICS partnership offers potential for sustainable growth and infrastructure development in African nations through initiatives like the New Development Bank (Yible, 2024). These initiatives collectively contribute to BRICS' vision of an alternative world order and the emerging Global South.

### **Recommendations**

- **Align National Policies with SDGs**

BRICS nations should integrate SDG targets into their domestic policy frameworks to ensure consistency in their global commitments. The alignment of national policies with the Sustainable Development Goals (SDGs) is crucial for achieving sustainable development. For India's agricultural sector, aligning policies with SDGs is essential for sustainable food production, with recommendations for an overarching policy to manage the entire agricultural value chain (Priyadarshini and Abhilash, 2020). To improve SDG implementation, countries should develop integrated follow-up and review frameworks that inform planning and monitoring cycles, invest in statistical capacity, and promote multi-stakeholder participation (Kandpal and Okitasari, 2022). India's National Education Policy 2020 demonstrates efforts to integrate SDG targets into domestic frameworks, particularly in education (Shukla et al., 2023). Similarly, Nigeria has made progress in incorporating SDGs into national plans, though challenges in implementation persist (Oweibia et al., 2024). These studies highlight the importance of policy alignment and effective implementation strategies in achieving the SDGs across various sectors.

- **Enhance Intra-BRICS Dialogue**

Regular high-level meetings and knowledge-sharing platforms can bridge gaps in priorities and foster mutual understanding. According to Alekseenko (2015) BRICS is a framework for dialogue between countries with different social and economic models, and different civilizations, promoting cooperation on global issues.

- **Focus on Inclusive Growth**

Addressing socio-economic disparities within member states should be prioritized to ensure sustainable and equitable development. The BRICS countries should also consider emerging concepts in science and technology that target the "bottom of the pyramid" to ensure more inclusive development (Soete, 2008). Inclusive growth strategies have shown positive effects, particularly in China and Brazil. Policy recommendations for sustainable growth include economic diversification, export-driven industrialization, and mainstreaming poverty reduction strategies. Inclusive growth in BRICS countries, particularly Brazil, China, and South Africa, has contributed to poverty reduction, with strong economic performance leading to reduced poverty rates. (Igbatayo and Awoyemi, 2014). Administrative reform in BRICS countries is crucial for inclusive economic growth and citizen participation, promoting governability, competitiveness, and public policy through participatory institutions (Smorgunov, 2018). Additionally, there is a need for country-specific approaches, enhanced social programs, and integration of existing policies to promote socioeconomic sustainability (Awolusi, 2021).

- **Expand Multilateral Engagements**

Collaborating with international organizations and other emerging economies can strengthen BRICS' advocacy for the 2030 Agenda. According to Panova (2021). BRICS, despite its potential weaknesses, is crucial for promoting multilateralism, international law, and interstate cooperation while providing stability at global, regional, and bilateral levels. BRICS Plus cooperation in international organizations could reshape the global agenda, particularly in the WTO, IMF, and World Bank. This may involve advocating for e-commerce and investment facilitation in the WTO, expanding the use of SDRs in

the IMF, and shifting the World Bank's agenda through collaboration with the New Development Bank and AIIB (Arapova and Lissovnikov, 2021). The BRICS play a crucial role in promoting greater multilateralism and democratization of global governance, particularly in financial matters, after the Covid-19 pandemic (Petrone, 2023).

### Conclusion

The BRICS nations hold immense potential to influence global sustainability pathways. Through initiatives like the NDB, renewable energy projects, and collaborative frameworks, they have made significant strides toward the 2030 Agenda. However, addressing challenges such as geopolitical tensions and socio-economic disparities is crucial for realizing their full potential. By fostering deeper cooperation and aligning national policies with SDGs, BRICS can emerge as a global leader in sustainable development and a champion for the 2030 Agenda.

### References

1. Alekseenko, O. A. (2015). BRICS: Prospects of Cooperation. *Globalistics and Globalization Studies: Big History & Global History. Yearbook/Edited by*, 119.
2. Arapova, E., & Lissovnikov, Y. (2021). The BRICS Plus Cooperation in International Organizations: Prospects for Reshaping the Global Agenda. *Asia-Pacific Social Science Review*. <https://doi.org/10.59588/2350-8329.1413>.
3. Awolusi, O. (2021). Economic Growth and Socioeconomic Sustainability in BRICS Countries: A Vector Error Correction Modeling Approach. *Journal of Economics and Behavioral Studies*. [https://doi.org/10.22610/JEBS.V13I3\(J\).3122](https://doi.org/10.22610/JEBS.V13I3(J).3122).
4. Bhan, M., Sharma, D., Ashwin, A., & Mehra, S. (2017). Policy forum: Nationally-determined climate commitments of the BRICS: At the forefront of forestry-based climate change mitigation. *Forest Policy and Economics*, 85, 172-175. <https://doi.org/10.1016/J.FORPOL.2017.09.013>.
5. Brüttsch, C., & Papa, M. (2013). Deconstructing the BRICS: Bargaining Coalition, Imagined Community, or Geopolitical Fad?. *The Chinese Journal of International Politics*, 6, 299-327. <https://doi.org/10.1093/CJIP/POT009>.
6. Chernikov, S. (2021). BRICS Network University potential as an educational platform for innovative cooperation. *RUDN Journal of Economics*, 29, 76-87. <https://doi.org/10.22363/2313-2329-2021-29-1-76-87>.
7. Cooper, A. (2017). The BRICS' New Development Bank: Shifting from Material Leverage to Innovative Capacity. *Global Policy*, 8, 275-284. <https://doi.org/10.1111/1758-5899.12458>.
8. Cooper, A., & Farooq, A. (2013). BRICS and the Privileging of Informality in Global Governance. *Global Policy*, 4, 428-433. <https://doi.org/10.1111/1758-5899.12077>.
9. Cousins, B., Borrás, S., Sauer, S., & Ye, J. (2018). BRICS, middle-income countries (MICs), and global agrarian transformations: internal dynamics, regional trends, and international implications. *Globalizations*, 15, 1 - 11. <https://doi.org/10.1080/14747731.2018.1429104>.
10. Da Silva, J., Desiraju, K., Matsoso, P., Ren, M., & Salagay, O. (2014). BRICS cooperation in strategic health projects. *Bulletin of the World Health Organization*, 92 6, 388. <https://doi.org/10.2471/BLT.14.141051>.
11. Dzhabiev, A. (2022). The Brics Transcontinental Association Is an Innovative Format of International Economic Partnership Without Sanctions Policy. *Ekonomika i Upravlenie: Problemy, Resheniya*. 1(2), 93-103. <https://doi.org/10.36871/ek.up.p.r.2022.02.01.012>.
12. Fu, Q., Álvarez-Otero, S., Sial, M., Comite, U., Zheng, P., Samad, S., & Oláh, J. (2021). Impact of Renewable Energy on Economic Growth and CO2 Emissions—Evidence from BRICS Countries. *Processes*. <https://doi.org/10.3390/PR9081281>.
13. Gladun, E., & Ahsan, D. (2016). BRICS Countries' Political and Legal Participation in the Global Climate Change Agenda. *Law*. <https://doi.org/10.21684/2412-2343-2016-3-3-8-42>.
14. Griffith-Jones, S. (2015). Financing global Development: The BRICS New Development Bank.
15. Gu, J., Renwick, N., & Xue, L. (2018). The BRICS and Africa's search for green growth, clean energy and sustainable development. *Energy Policy*. <https://doi.org/10.1016/J.ENPOL.2018.05.028>.

16. Helleiner, E., & Wang, H. (2018). Limits to the BRICS' challenge: credit rating reform and institutional innovation in global finance. *Review of International Political Economy*, 25, 573 - 595. <https://doi.org/10.1080/09692290.2018.1490330>.
17. Hofman, B., & Srinivas, P. (2024). New Development Bank's role in the global financial architecture. *Global Policy*. <https://doi.org/10.1111/1758-5899.13389>.
18. Hyder, A., & Vecino-Ortiz, A. (2014). BRICS: opportunities to improve road safety.. *Bulletin of the World Health Organization*, 92 6, 423-8 . <https://doi.org/10.2471/BLT.13.132613>.
19. Igbatayo, S., & Awoyemi, B. (2014). Exploring Inclusive Growth and Poverty Reduction Strategies in the BRICS Economies: A Multi-Country Study of Brazil, China and South Africa. *IOSR Journal of Economics and Finance*, 5, 54-68. <https://doi.org/10.6084/M9.FIGSHARE.1243633>.
20. Jha, P., & Chakraborty, A. (2013). BRICS in the Contemporary Global Economy: Prospects and challenges.
21. Kahn, M. (2015). Prospects for Cooperation in Science, Technology and Innovation among the BRICS Members. *International Organisations Research Journal*, 10, 140-159. <https://doi.org/10.17323/1996-7845-2015-02-140>.
22. Kandpal, R., & Okitasari, M. (2022). Advancing Follow-up and Review for the SDGs: Lessons from the 2021 Voluntary National Reviews. <https://doi.org/10.53326/acrt2498>.
23. Khomyakov, M. (2018). BRICS and Global South: Towards Multilateral Educational Collaboration. , 2, 329-350. <https://doi.org/10.15826/csp.2018.2.4.050>.
24. Králíková, K. (2014). BRICS: Can a marriage of convenience last?. *European View*, 13, 243-250. <https://doi.org/10.1007/s12290-014-0326-2>.
25. Li, J. (2021). Sustainable Development in BRICS Countries: From Concept to Practice. *Springer Geography*. [https://doi.org/10.1007/978-3-030-78690-8\\_21](https://doi.org/10.1007/978-3-030-78690-8_21).
26. Lissovolik, Y. (2023). BRICS-Plus: the New Force in Global Governance. *Journal of International Analytics*. <https://doi.org/10.46272/2587-8476-2023-14-1-138-148>.
27. Mathur, A. (2014). South-South and Triangular Cooperation for Peace and Development: Bridging the Policy Gap.
28. Nuruzzaman, M. (2022). Conflicts, strategic divergences and the survival of economic groupings: Will China–India rivalry make BRICS obsolete?. *Asian Journal of Comparative Politics*, 7, 1025 - 1044. <https://doi.org/10.1177/20578911221108800>.
29. Oweibia, M., Elemuwa, U., Akpan, E., Daniel, E., Oruikor, G., Tarimobowei, E., Okoho, E., Elemuwa, C., Raimi, M., & Babatunde, A. (2024). Analyzing Nigeria's Journey Towards Sustainable Development Goals: A Comprehensive Review From Inception to Present. *Qeios*. <https://doi.org/10.32388/8o5qeg>.
30. Ozturk, I. (2015). Sustainability in the food-energy-water nexus: Evidence from BRICS (Brazil, the Russian Federation, India, China, and South Africa) countries. *Energy*, 93, 999-1010. <https://doi.org/10.1016/J.ENERGY.2015.09.104>.
31. Panova, V. (2021). Age of Multilateralism: Why is BRICS Important despite Possible Weaknesses? A Perspective from Russia. *Global Policy*. <https://doi.org/10.1111/1758-5899.13013>.
32. Papa, M., & Verma, R. (2021). Scenarios for BRICS Evolution in Light of the India–China Conflict. *Global Policy*. <https://doi.org/10.1111/1758-5899.13010>.
33. Pathak, L., & Shah, K. (2019). Renewable energy resources, policies and gaps in BRICS countries and the global impact. *Frontiers in Energy*, 1-16. <https://doi.org/10.1007/S11708-018-0601-Z>.
34. Petrone, F. (2023). Why we need a multilateralism that works and what is the role of the BRICS: lessons from the recent Covid-19 pandemic. *BRICS Journal of Economics*. <https://doi.org/10.3897/brics-econ.4.e99323>.

35. Pitukhina, M., Gurtov, V., & Belykh, A. (2024). Technological Innovations and Artificial Intelligence Implementation in Global Economic Processes Development: Experience of BRICS Countries. *Transbaikal State University Journal*. <https://doi.org/10.21209/2227-9245-2024-30-1-119-129>.
36. Priyadarshini, P., & Abhilash, P. (2020). Policy recommendations for enabling transition towards sustainable agriculture in India. *Land Use Policy*, 96, 104718. <https://doi.org/10.1016/j.landusepol.2020.104718>.
37. Ren, Y., Li, Z., Wang, Y., & Zhang, T. (2020). Development and Prospect of Food Security Cooperation in the BRICS Countries. *Sustainability*. <https://doi.org/10.3390/su12052125>.
38. Rensburg, I., Motala, S., & David, S. (2015). Opportunities and challenges for research collaboration among the BRICS nations. *Compare: A Journal of Comparative and International Education*, 45, 814 - 818. <https://doi.org/10.1080/03057925.2015.1074823>.
39. Rensburg, I., Motala, S., & David, S. (2016). Research collaboration among emerging economies: policy and economic implications for BRICS nations. *International Journal of Economic Policy in Emerging Economies*, 9, 344. <https://doi.org/10.1504/IJEPEE.2016.10002394>.
40. Rout, S., & Mallick, H. (2024). The socioeconomic dimensions of BRICS: a comparative analysis over three decades 1990 to 2020. *Global Studies on Economics and Finance*. <https://doi.org/10.58396/gsef010206>.
41. Sakharov, A. (2024). BRICS Countries' Progress in Achieving the Climate and Environmental Goals of Agenda 2030. *International Organisations Research Journal*. <https://doi.org/10.17323/1996-7845-2024-01-05>.
42. Sakurai, M. (2015). The post-2015 development agenda and South–South and triangular cooperation – How the partnership model should be?. *Global Social Policy*, 15, 337 - 341. <https://doi.org/10.1177/1468018115600123b>.
43. Shaidullina, V., & Semenovskiy, I. (2022). BRICS Countries' Economic and Legal Cooperation Through the Prism of Strategic Planning Documents. *BRICS Law Journal*. <https://doi.org/10.21684/2412-2343-2022-9-1-4-34>.
44. Shelepov, A. (2018). BRICS Engagement with International Institutions for Better Governance. <https://doi.org/10.4324/9781315569925-3>.
45. Shukla, T. D., Singh, H., Bishnoi, A., & Padda, A. S. (2023). Alignment of India's National Education Policy 2020 with the United Nations' Sustainable Development Goals: A Path towards Quality Education for All. *World Journal of Advanced Research and Reviews*, 19(3), 049-054. <https://doi.org/10.30574/wjarr.2023.19.3.1768>.
46. Smorgunov, L. (2018). Inclusive Growth and Administrative Reform in the BRICS Countries., 80-95. <https://doi.org/10.17323/1999-5431-2018-0-5-80-95>.
47. Soete, L. (2008). Science, Technology and Development: Emerging concepts and visions. [https://doi.org/10.1057/9780230276123\\_18](https://doi.org/10.1057/9780230276123_18).
48. Svetlicinii, A. (2019). Sustainable Development and the New Development (BRICS) Bank: The Contribution of the BRICS Countries. *Governing China in the 21st Century*. [https://doi.org/10.1007/978-981-32-9644-2\\_6](https://doi.org/10.1007/978-981-32-9644-2_6).
49. Yiblet, F. (2024). Unlocking New Opportunities: BRICS Partnership and Its Implications for Economic Development in African Countries. *Journal of Entrepreneurship and Business Innovation*. <https://doi.org/10.5296/jebi.v11i1.22012..>

