From Poverty to Progress: A Comparative Analysis of Mongolia with PEER Countries

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Abstract: Mongolia, grappling with significant socio-economic challenges, faces pressing issues of inequality and poverty, as evidenced by a high Gini coefficient and the highest poverty rate among the top 20 largest Asian countries. Despite government efforts, Mongolia's poverty rate experienced only a slight reduction from 29.6 percent in 2016 to 27.8 percent in 2020. PEER countries, such as South Africa, Botswana, Kazakhstan, and Peru, share characteristics with Mongolia, including reliance on the mining industry and classification as lower middle-income countries. Successful transitions of these countries to upper middle-income status between 1994 and the 2010s provide valuable insights. Drawing on secondary analyses of existing research and PEER country profiles, the study evaluates past policies, identifies gaps in current approaches, and proposes recommendations to combat poverty sustainably. The hypothesis includes a reliance on the mining industry and a transition from lower to upper middle-income status. Policies from these countries, such as the GEAR policy in South Africa and economic diversification in Botswana, offer insights into Mongolia's development. This essay aims to illuminate the multidimensional nature of underdevelopment in Mongolia through a secondary analysis of existing research and PEER country profiles, evaluating past policies, identifying gaps in current approaches, and providing recommendations for sustainable progress. Drawing inspiration from PEER countries, Mongolia can implement policies such as economic diversification to reduce vulnerability and create stable job opportunities. Emphasis on infrastructure, human capital, and strategic partnerships for Foreign Direct Investment (FDI) aligns with successful strategies implemented by PEER countries, providing a roadmap for Mongolia's development objectives.

Keywords: Poverty Inequality, Gini Coefficient, PEER countries, Economic Diversification, Nomadic Animal Husbandry

1. Introduction

The Sustainable Development Goals (SDGs), established by the United Nations in 2015, provide a crucial framework for global development, with a primary focus on ending poverty in all its forms everywhere. Mongolia, as a nation facing significant socio-economic challenges, confronts a critical need to address pressing issues of inequality and poverty. Mongolia's high Gini coefficient, surpassing the global average, and its highest poverty rate among the world's top 20 largest countries in the Asian region underscore the urgency to tackle these challenges [1]. According to Jason

Hickel's *"The Divide"*, development should prioritize the well-being and quality of life of a country's citizens over the the narrow focus on GDP growth [2]. The country's economy is further complicated by factors such as low labor force participation, which refers to the relatively small percentage of the working-age population that is either employed or actively seeking employment. This low labor force participation can hinder economic growth and social well-being. Additionally, the nation faces over-reliance on the mining sector, escalating fiscal risks, which means growing threats to the government's financial stability due to factors like rising public debt and budget deficits, environmental pollution, and imbalances in the external sector. Collectively, these challenges present formidable obstacles to thorough development. Despite the government's efforts, Mongolia's poverty rate fell slightly from 29.6 percent in 2016 to 27.8 in 2020 [3]. Given these circumstances, this essay aims to illuminate the multidimensional nature of underdevelopment in Mongolia through a secondary analysis of existing research and PEER country profiles, evaluate the effectiveness of past policies, identify gaps in current approaches, and make recommendations on strategies that can help Mongolia combat poverty and progress sustainably.

2. Hypothesis

The profiles of PEER countries, such as South Africa, Botswana, Kazakhstan, and Peru, share common characteristics with Mongolia. These include a heavy reliance on the mining industry and classification as lower middle-income countries for a significant period. Between 1994 and the 2010s, these countries successfully transitioned to upper middle-income status [4]. Notably, South Africa has sustained its upper middle-income status for several years, with mining remaining a vital sector in its national economy. The South African government implemented two key strategies: the Growth, Employment, and Redistribution (GEAR) policy [5], which aimed to empower previously disadvantaged racial groups, increase employment, and address gender and social inequalities. The GEAR policy achieved modest success in meeting its fiscal deficit, inflation, and government consumption targets by the end of 2000, reporting figures of 2.2%, 5.4%, and 18%, respectively [5]. Another significant policy, the Accelerated and Shared Growth Initiative for South Africa (ASGIS), was launched in 2006, focusing on improving access to mineral rights, taxation, and environmental management [6]. From 2006 to 2010, South Africa's GNI per capita increased from $6180 to $6810, calculated by the World Bank.

Similarly, Botswana, initially classified as a lower middle-income country by the World Bank in the late 1990s, now enjoys upper middle-income status due to the significance of the mining industry on its economy since 2005. The government pursued economic diversification to reduce inequality, investing heavily in infrastructure and human capital, fostering strategic partnerships for Foreign Direct Investment (FDI), and promoting regional integration for increased trade [7]. As a result, Botswana's GNI per capita surged from $2780 to $5460 between 2002 and 2007, according to the World Bank's sources.

Kazakhstan's trajectory was also remarkable, transitioning from a lower middle-income country around 2005 to an upper middle-income country. The government launched the Mining-Smarting Industry Development Program from 2010 to 2014, effectively allocating mining resources and promoting sustainability in the private sector. Kazakhstan's GNI per capita grew from $7440 to $12080 from 2010 to 2014, as reported by the World Bank in 2022. Similarly, Peru experienced a successful transition from lower middle-income to upper middle-income country around the 2010s through the implementation of comparable policies. Peru's GNI per capita rose from $4380 to $6290 between 2010 and 2015, according to the World Bank in 2022.

By examining the policies and strategies adopted by these PEER countries, potential approaches to uplift Mongolia's economy, address poverty, and promote sustainable progress can be identified. The common characteristics shared with these countries, such as heavy reliance on the mining industry

and lower middle-income status, present opportunities for Mongolia to implement similar policies. One potential approach is economic diversification to reduce its vulnerability to external shocks and create stable job opportunities for its workforce, which has proven successful in Botswana and Kazakhstan by investing in non-resource sectors such as manufacturing, technology, and services. Additionally, the strategies adopted by South Africa and Botswana to address inequality and empower disadvantaged groups through policies like the GEAR policy and economic diversification efforts can serve as models for Mongolia. By investing in infrastructure, and human capital, and fostering strategic partnerships for Foreign Direct Investment (FDI), Mongolia can work towards reducing inequality and improving the overall well-being of its population. These strategic partnerships involve collaborating with foreign governments, corporations, and international organizations to attract FDI that aligns with Mongolia's development objectives like diversification, drawing inspiration from successful strategies implemented by PEER countries.

3.   Diversification of the Economy for Better Allocation

A quote from Thilasoni Benjamin Musuku, World Bank Acting Country Manager for Mongolia, "Strengthening the non-mining sector's contribution will be important to sustaining economic growth and expanding labor opportunities for the workforce, especially women." Economic diversification involves investing in non-resource sectors, such as manufacturing, technology, and services. Mongolia does possess certain comparative advantages in these areas. For instance, its vast expanses of suitable land and nomadic herding tradition offer potential in agriculture. The country also has significant renewable energy potential, with ample space for wind and solar installations. Additionally, Mongolia's unique landscapes and nomadic culture can be harnessed to boost the tourism sector. However, significant obstacles must be addressed. Infrastructure development, especially in transportation and energy, is needed to support non-mining sectors. Improved access to international markets, a skilled workforce, regulatory reforms, and environmental sustainability are all urgent priorities of Mongolia's economic diversification efforts. Mongolia's overdependence on the mining sectors demands the exploration of other potential economic avenues to reduce vulnerability to external shocks.

4.   Mining Industry

4.1.   Value-added Process

There are possibilities to transform mining into a value-added process by producing secondary products from mining activities. This concept is known as mineral beneficiation or value addition in the mining industry. The traditional approach to mining involves extracting raw materials and exporting them in their primary form. However, according to Table 1 [8], the semi-manufactured forms' unit value is much higher than other crude products. The production of secondary products from mining activities can transform mining into a value-added process.

Table 1: EXPORT'S MAIN MINING PRODUCTS, in the end of selected years

Main commodities	Measure-ment unit	Volume			Value			2022 Average value million $/t
		2021	2022	2022*\n2021	2021	2022	2022*\n2021	
		million US dollars					percent	
Copper concentrates	thous.t	1282.5	1453.3	113.3	2899.9	2734.8	94.3	1.4533
Coal	mln.t	16.1	31.8	197.1	2779.5	6502.7	234.0	0.0000318
Gold, unwrought or in semi-manufactured forms	t	17.2	19.7	114.0	1004.5	1127.4	112.2	19.7
Iron ores and concentrates	thous.t	7106.2	4732.2	66.6	952.2	391.0	41.1	4.7322
Crude petroleum oils	thous.bb	4348.9	2605.7	59.9	273.4	241.8	88.5	0.00000043489

Source: National Statistics Office of Mongolia (2023)
[https://downloads.1212.mn/kV0rg-XQ-h0MzytC-Yg-C9vAMDh9CvcKai8HvtiI.pdf].
Note: The Average value million $/t in 2022 was calculated by the author based on the data from the National Statistics Office of Mongolia.

There are possible ways that a value-added process can be applied to the raw materials of Mongolian exports, such as refining and processing. The extraction of minerals from mines often requires refining and processing to enhance their quality and purity. For instance, minerals like iron ore can undergo processing to produce higher-grade iron concentrates, which can then be utilized in steel production. By refining these raw materials, Mongolia can significantly increase their worth, making them more attractive in the global market. This value-added step transforms basic raw materials into more valuable products, opening up new avenues for export and diversifying the economy.

Beneficiation can also add value to the primary products quickly. Mineral beneficiation involves various techniques, such as crushing, grinding, and gravity or magnetic separation, to separate and concentrate valuable minerals from their ores [6]. By concentrating the valuable minerals, the volume of waste is reduced, and the economic value of the extracted material is enhanced. This process not only increases the economic worth of the minerals but also reduces the environmental impact of mining activities. As Mongolia relies heavily on its mining sector, implementing beneficiation practices can lead to more sustainable and efficient resource management.

4.2. Transparency

Resource-rich developing countries often find themselves trapped in the "Paradox of Plenty," where abundant natural resources fail to translate into broad-based economic growth and prosperity for their citizens [9]. Mongolia, like many resource-rich countries, faces challenges associated with the "Paradox of Plenty." The over-reliance on mining revenues can lead to economic volatility, as the sector is susceptible to global market fluctuations. This can result in budgetary instability and hinder long-term planning. Also, weak governance structures can foster corruption and rent-seeking

behavior, where elites capture the benefits of mining at the expense of the broader population. Meanwhile, inadequate regulatory oversight can lead to environmental degradation, threatening Mongolia's unique landscapes and nomadic culture. Several countries have demonstrated a commitment to transparency and accountability, leading to more equitable distribution of mining revenues and sustainable development. For example, Botswana has effectively managed its diamond resources through partnerships with reputable mining companies and stringent regulations [7]. Revenue generated from diamonds has been reinvested in education, healthcare, and infrastructure, contributing to sustained economic growth and poverty reduction. Mongolia can learn from the PEER countries' experiences by implementing and enforcing regulations that require mining companies to disclose their payments to the government, ensuring transparency in revenue collection. Currently, the Mongolian government has participated in the Extractive Industries Transparency Initiative (EITI) since 2005 under the guidance of the World Bank, improving access from 25 companies' revenue to 200 from 2006 to 2013 [10]. However, EITI implementation is an ongoing process, and achieving compliance is just the beginning. Continued efforts are essential to strengthen the accountability side of the equation. Transparency tools developed under EITI can be applied to other sectors like agribusiness.

4.3. Agribusiness

Agribusiness is concentrated on the value-added process of agricultural products. The predominantly nomadic animal husbandry sector, covering 75% of Mongolia's land, offers a strong foundation for value addition and diversification within the agricultural landscape [11]. Nomadic communities, which rely on herding and grazing animals, can explore various ways to enhance the value of their products and processes to improve their livelihoods and economic opportunities like diversification of livestock products. For example, they can process milk to produce value-added products such as cheese, yogurt, and butter. These processed dairy products often have a higher market value compared to raw milk and can provide an additional source of income for nomadic herders. Also, Mongolia can engage in the value-added processing of animal hides and wool. They can set up small-scale tanneries to produce leather goods such as bags, shoes, and garments. Similarly, they can explore ways to process wool to create higher-value products like carpets, blankets, and clothing items. Not to mention the traditional skills they have in crafting various artisanal products.

Meanwhile, Mongolians can capitalize on these skills to create unique handicrafts and traditional items that appeal to tourists and collectors. These products can be marketed locally or internationally to generate income for the community. According to the South African Food Cost Review 2008 by the National Agricultural Marketing Council (NAMC), food is primarily sold in stand-alone supermarkets or spaza shops in rural areas, in contrast to urban areas where supermarkets are the main retail outlets for food. Therefore, agro-tourism can be developed by offering guided tours, tourism souvenirs, and opportunities to participate in daily activities such as herding or milking to increase visitors who are interested in learning about their way of life and traditional practices. This can include offering guided tours, cultural performances, and opportunities to participate in daily activities such as herding, milking, or weaving.

5. Nurturing Human Capital

5.1. Improving Labor Force Participation Rate

The labor force participation rate represents an approximation of the working population within an economy [12]. Mongolia has a low Labor force participation rate, of 58.7 [12]. The government can establish programs to develop skills through vocational training, enhancing the employability of the workforce. By aligning training with the needs of industries in demand, individuals can acquire

relevant skills, making them more attractive to employers. This can lead to increased labor force participation as more individuals actively seek and secure employment.

Meanwhile, the promotion of women's empowerment is necessary. Women's participation in the labor force in Mongolia is relatively low, 51.5 while the literacy rate is higher than males [12]. Implementing policies that promote gender equality, such as improved access to education, equal pay, and flexible work arrangements, can encourage more women to enter and remain in the workforce. One of the key components of the South African government's successful policy was the Black Economic Empowerment (BEE) initiative, which aimed to uplift previously disadvantaged racial groups and promote broader social and economic inclusion [5]. With similar approaches, Mongolia can gradually break gaps in gender with a more active labor force.

5.2. Research & Development

Only 0.1 percent of the country's GDP has been spent on R&D, much lower than the OECD average of 2.68 percent [13]. Despite the Mongolian government's imposed reforms aimed at unifying teaching and research, the existing system still reflects Soviet-era structures, with research being a relatively weak component of academic responsibilities. The modern-day Academy of Sciences, which is supposed to be a leading research institution, has a lower research output than the country's universities, raising questions about the allocation of research funding [14]. Conflicting ambitions in higher education reform have led to an increase in the quantity of research but a decrease in its quality, resulting in a lack of essential factors such as good governance, rigorous research culture, and adequate funding to fully build research capacity. To address the moral hazard of the Mongolian government's approach to research capacity building, the government can encourage collaborations with international institutions to enhance research skills and knowledge exchange and foster collaboration between universities and national research institutions to leverage each other's strengths and promote a more unified approach to research. This can lead to increased research productivity and impact with an improvement of moral hazard.

6. Greening Private Sector

Mongolia, known for its nomadic animal husbandry, faces challenges related to overgrazing, which can lead to land degradation and environmental issues [15]. To address these challenges, Mongolia can take inspiration from Kazakhstan's efforts to green its private sector, improving the living standard of the livelihoods of nomadic herders. Encouraging environmental improvements in manufacturing hinges on gaining the support and active participation of private companies, which comprised 79.7% of the sector's total workforce in 2020 and contributed 80.4% to the manufacturing sector's value-added in 2019 for Kazakhstan [16]. Drawing a parallel, Mongolia can promote green management by encouraging herders and livestock owners to adopt green management practices to monitor and reduce resource consumption, including water and pasture, and launching awareness campaigns to educate herders and the public about the importance of sustainable grazing practices and their long-term benefits. To further prevent the moral hazard, the Mongolian government can provide financial incentives or subsidies to firms in the short term, such as rotational grazing practices or improved animal husbandry techniques, while implementing regulations and standards to set clear guidelines for herders and livestock owners. However, it's crucial that these subsidies are limited in the long run to avoid the financial aid agenda [2], where herders and livestock owners become overly dependent on continuous financial support rather than transitioning towards self-sufficiency and sustainable practices.

7.   Conclusion

In conclusion, Mongolia faces significant socio-economic challenges, particularly in addressing poverty and inequality. Despite the government's efforts, the country's poverty rate remains stubbornly high, necessitating comprehensive strategies to effectively combat these pressing issues. Drawing insights from the profiles of PEER countries, including South Africa, Botswana, Kazakhstan, and Peru, can provide valuable lessons for Mongolia's policy direction. Emulating successful policies such as economic diversification and empowering disadvantaged groups can be instrumental in shaping Mongolia's economic landscape. By investing in non-resource sectors, forging strategic partnerships, and prioritizing the reduction of inequality and the improvement of human capital, Mongolia can pave the way for sustainable development. To forge a prosperous economic future, Mongolia must adopt a multi-dimensional approach and learn from the experiences of PEER countries. By doing so, the nation can better address poverty, foster equitable growth, and enhance its overall development prospects.

References

[1]   United Nations. (n.d.). *Poverty*. Retrieved from https://www.un.org/sustainabledevelopment/poverty/
[2]   Hickel, J. (2018). *The Divide: A Brief Guide to Global Inequality and its Solutions*. Windmill Books.
[3]   World Bank. (2020). *Mongolia Poverty Update*. Retrieved from https://www.worldbank.org/en/country/mongolia/publication/mongolia-poverty-update
[4]   Andreoni, A; Tregenna, F. (2021). *The Middle-Income Trap and Premature Deindustrialization in South Africa*. https://doi.org/10.1093/oso/9780192894311.003.0011
[5]   South African History Online. (n.d.). *South Africa's Key economic policies changes (1994 - 2013)*. South African History Online. Retrieved from: https://www.sahistory.org.za/article/south-africas-key-economic-policies-changes-1994-2013
[6]   South African Department of Mineral Resources. (n.d.). *Beneficiation Economics*. Retrieved from https://www.dmr.gov.za/mineral-policy-promotion/beneficiation-economics
[7]   Lewin, M. (2011). *Botswana's Success: Good Governance, Good Policies, and Good Luck*. World Bank. Retrieved from https://documents1.worldbank.org/curated/en/304221468001788072/930107812_201408253094647/additional/634310PUB0Yes0061512B09780821387450.pdf
[8]   National Statistical Office. (2023). *Export increased by 22.9 percent compared to the previous year*. Retrieved from https://downloads.1212.mn/kV0rg-XQ-h0MzytC-Yg-C9vAMDh9CvcKai8HvtiI.pdf
[9]   Levenstein, H. (2003). *Paradox of Plenty: A Social History of Eating in Modern America, Revised Edition*. University of California Press.
[10] World Bank. (2013). *Extractive Industries Transparency Initiative: Results Profile*. World Bank. https://www.worldbank.org/en/results/2013/04/15/extractive-industries-transparency-initiative-results-profile
[11] United Nations. (2022). *Statistical Yearbook 2022*. Statistics Division, Department of Economic and Social Affairs, of the United Nations Secretariat.
[12] World Bank. (n.d.). *Labor force participation rate, total (% of total population ages 15+)*. Retrieved from https://data.worldbank.org/indicator/SL.TLF.CACT.NE.ZS?locations=MN
[13] World Bank. (2023). *Mongolia's Economy to Accelerate in 2023, but Reforms and Diversification Needed to Sustain Growth*. Retrieved from https://www.worldbank.org/en/news/press-release/2023/04/19/mongolia-s-economy-to-accelerate-in-2023-but-reforms-and-diversification-needed-to-sustain-growth
[14] Gantogtokh, O. (2022). *Mongolia's Paradoxical Education Problem*. East Asia Forum. Retrieved from: https://www.eastasiaforum.org/2022/07/21/mongolias-paradoxical-education-problem/
[15] International Monetary Fund (IMF). (2019, December 10). *Greening Growth in Mongolia*. International Monetary Fund (IMF). https://www.imf.org/en/News/Articles/2019/12/09/na121019-greening-growth-in-mongolia
[16] Mariana Ioottyasset Bizhanga, & Ukhjar Ospanova. (2023, February 16). *What Would It Take to Green the Private Sector in Kazakhstan?* World Bank Blogs. https://blogs.worldbank.org/europeandcentralasia/what-would-it-take-green-private-sector-kazakhstan