

# ***Finding Paths out of Poverty for Mongolia***

**Weiyue Zhao<sup>1,a,\*</sup>**

<sup>1</sup>*College of Humanities and Arts, Macau University of Science and Technology, Macau, 999078, China*

*a. 2539110424@qq.com*

*\*corresponding author*

**Abstract:** In this passage, the problem of poverty in Mongolia is discussed. And it suggests three solutions. The first hypothesis proposes using Zambia's experience in system development as a model for improving technology and the economy of Mongolia. The second hypothesis aims to lessen dependency on the mining industry by growing non-mining sectors, especially tourism. The third hypothesis suggests developing a satellite launch facility and offering services to nations like China and Russia in order to promote a knowledge-based economy. These hypotheses are supported by the argument's reasoning and supporting data. It highlights the necessity of technological development, international partnerships, and diversification to end poverty in Mongolia. With the correct policies and cooperation among stakeholders, sustainable development is possible, as the paragraph highlights

**Keywords:** Mongolia, overcome poverty, mining industry, social development

## **1. Introduction**

In modern society, the technology has changed most peoples' lives, however, there are still huge numbers of people suffering pain of poverty. It is the serious question that everyone should be concerned about. So what is "poverty"? The World Bank gives "Poverty" a clear definition as: "Poverty is the lack of, or the inability to achieve, a socially acceptable standard of living.[1] Mongolia is a landlocked country in East Asia, facing the challenge of poverty despite its vast natural resources and potential for economic growth. With a population of approximately 3 million people, Mongolia has been grappling with poverty rates that have remained stubbornly high, particularly in rural areas. Our research group notice that Mongolia is a low& middle country with 27.8% poverty rate[2] ,it is a really big number. So we decide to make hypotheses and try to find some pathways for Mongolia out of poverty.

## **2. Hypotheses**

Hypothesis1: Learning from Zambia to build a complete system and contribute on technology.

Hypothesis 2: Expanding non-mining sectors, especially develop tourism.

Hypothesis3:Promoting a knowledge-based economy, such as building satellite launch center and provide them for China and Russia.

### 3. Argument

For hypothesis 1. From 2002 to 2011, because of the development of mining, the GDP of Mongolia increased in a very rapid way by selling primary mineral resources. After 2011, due to the price of mineral resources remains on a downswing, the economic downturn has deepened. [3] And long-term over-exploitation has led to serious environmental problems. But Mongolian government hasn't set a complete law to change these situations till now so that the GDP still not optimistic.

Zambia used to be a least developed country but now it has become a developing country. Comparing from the aspect of GDP, Zambia is far more than Mongolia in 21st century according to the World Bank. In addition, Mining is the mainstay industry of Zambia, especially copper mining. In the beginning of Zambia mining history, mining is done by private enterprises. But the government didn't satisfy with the development of mining. So nationalization of the Zambian mines began with the Matro declaration of 1969. This situation continued until 2000, with the political instability, the mine was returned to private ownership. The new mine owners invested massively in the mines and there was a sudden economic upturn, not only on the Copperbelt but in the country as a whole, with the mining industry as a pivotal contributor. The mines performed badly during the period of nationalization, since they lost focus from their core business. Continuous re-investment in machinery and new technology is very important for increasing productivity.[4] So I make a hypothesis that let Mongolia learn from Zambia to build a complete system and contribute on technology. The Asian Development Bank and the United Nations viewed Mongolia's lack of private land ownership as problematic for capitalist development and encouraged privatization policies, including expanded mineral exports[5]. Behindhand antiquated technology leads to low productive efficiency, that causes the waste of mineral resources.

If Mongolia is willing to increase the income of mining, they could mirror the policy of Zambia to transfer the right of managing mining to private company. They just need to concern on profit maximum and they are supposed to pay expensive tax to the Mongolian government. The government should concern including employment, foreign exchange, trade balance and the preservation of resources. [6]

For hypothesis 2, Mongolia's economy has experienced significant fluctuations due to its dependence on the mining sector, particularly in the extraction of coal, copper, and gold. [7] While mining has brought economic growth and foreign investment, it has also exposed the country to the risks associated with commodity price fluctuations[8]. This vulnerability has been evident in recent years, with the country experiencing economic downturns and a widening wealth gap. To reduce this vulnerability and promote sustainable economic growth, Mongolia needs to diversify its economy and reduce its reliance on mining.

Encouraging the growth of industries such as tourism, agriculture, manufacturing, and renewable energy can reduce dependence on mining and create employment opportunities. Mongolian government doesn't have experience in developing tourism. Learning from Inner Mongolia Autonomous Region of China, it has two advantages against Mongolian tourism. The first advantage is inner Mongolia's economic entities completed the transformation early, from graziery to tourism. It means they don't need to sacrifice the ecological environment to gain profits [9], so the grass environment is protected well. But the long nomadic life of the Mongols greatly damaged the grasslands. The other advantage is publicity aspect. There are numbers of sceneries in inner Mongolia, but few famous scenic spots in Mongolia. Though Mongolia's unique cultural heritage, pristine landscapes, and nomadic traditions make it an attractive destination, few tourists will choose Mongolia as a travel destination because the lack of publicity. And affected by the geographic factors, people can hardly approach to Mongolia unless by plane. It means that there will take more time and money cost. By investing in infrastructure, promoting sustainable tourism practices, and marketing

Mongolia as a tourist destination, the country can diversify its revenue streams. Firstly making experiments in Ulaanbaatar, the capital city of Mongolia, attempting to improve infrastructure to test the feasibility of the measure.

For hypothesis 3. In the period of Soviet Union, since the trend of policy in Outer Mongolia assumed the full development of both economic and social revolution in the future, and since both depend on the ability to draw on the economic resources of the Soviet Union as well as on the ideas of the Communist Party, Outer Mongolia may well be called a satellite of the Soviet Union.[10] This can prove from the historical level that the two countries have good relations. But the “satellite” mentioned above is different from the true satellite that I want to talk about. “The launch site must also have a clear pathway downrange so the launch vehicle will not fly over populated areas, in case of accidents. The STS has the additional constraint of requiring a landing strip with acceptable wind, weather, and lighting conditions[11]” Comparing with Jiuquan satellite launch center, which have the most similar condition to Mongolia. Jiuquan Satellite Launch Center has an inland and desert climate with an average annual temperature of 8.5°C and a relative humidity of 35%-55%. Perennial dry less rain, less cloud, long sunshine time. The launch site is located in the latitude 41.118 degrees north, longitude 100.16 degrees east. The geography of Mongolia is varied, with the Gobi Desert to the south, nearly in the latitude 41 degrees north. And there is a northern city named Danlandzadgad, locating on this flat desert. Similar latitudes mean that the acceleration required for takeoff is close.[12] And basic on the data of Mongolia weather bureau, almost all meteorological data is similar to Jiuquan, because the geographical location and topographic conditions are basically the same. In addition, two thirds population of Mongolia basic in the capital city Ulan Bator.[13] There are very few people especially in the southern desert. In conclusion, Mongolia meets the basic conditions for building a satellite launch center. But as a low & middle income country, it is impossible for Mongolia to build a launch center in practice or even actually launch a satellite themselves. But there are two strong neighbors Russia and China, and there are often satellite launch missions. The most important thing is that launching satellite is harmful to the environment, so that the two countries may want to find other countries to do it for them. For Mongolia, this is an important measure to enhance the national scientific and technological strength. It can also strengthen exchanges between Mongolia and other scientific and technological powers, and improve international relations. Communicating with Russia and China, two high-technology countries, is a convenient way to improve itself and access to the world's leading edge information. With the resources of the launch site and the technology to build the satellite, it will be much easier for them to produce a satellite independently. In a short term, this measure may cause environmental damage and just get a little bit profit. But in a long term, from helping other countries launch satellites to developing satellites of their own, I believe that can provide a way to make money and improve their poverty situation.

#### 4. Conclusion

Alleviating poverty in Mongolia requires a comprehensive and multi-faceted approach, it is impossible to solve it easily. Promoting a knowledge-based economy and expanding non-mining sectors, Mongolia can reduce its dependence on mining and create a more diverse and sustainable economic base. This will not only provide more job opportunities but also foster innovation and entrepreneurship, driving long-term economic growth. And building satellite launch center could also potentially help lift Mongolia out of poverty. The specific feasibility of the content remains to be studied.

In conclusion, Mongolia has the potential to overcome the challenges of poverty and achieve sustainable development. However, achieving these goals will require strong political will, effective governance, and collaboration among various stakeholders, including the government, private sector,

civil society, and international partners. With concerted efforts and a long-term vision, Mongolia can chart a path out of poverty and build a brighter future for generations to come.

## References

- [1] Davis, B. (2003). Choosing a method for poverty mapping. Food & Agriculture Org..Baatarzorig, T., Galindev, R., & Maisonnave, H. (2018). Effects of ups and downs of the Mongolian mining sector. *Environment and Development Economics*, 23(5), 527-542.
- [2] Sikamo, J., Mwanza, A., & Mweemba, C. (2016). Copper mining in Zambia-history and future. *Journal of the Southern African Institute of Mining and Metallurgy*, 116(6), 491-496.
- [3] Sneath, David. 2003. "Lost in the Post: Technologies of Imagination, and the Soviet Legacy in PostSocialist Mongolia." *Inner Asia* 5 (1): 39-52.
- [4] Reeves, Jeffrey. 2011. "Resources, Sovereignty, and Governance: Can Mongolia Avoid the 'Resource Curse'?" *Asian Journal of Political Science* 19 (2): 170-185.
- [5] Ndulo, M. (1986). Mining legislation and mineral development in Zambia. *Cornell Int'l LJ*, 19, 1.
- [6] Guo, S., He, P., Bayaraa, M., & Li, J. (2020). Greenhouse gas emissions embodied in the Mongolian economy and their driving forces. *Science of The Total Environment*, 714, 136378.
- [7] Baatarzorig, T., Galindev, R., & Maisonnave, H. (2018). Effects of ups and downs of the Mongolian mining sector. *Environment and Development Economics*, 23(5), 527-542.
- [8] Zhen, L., Ochirbat, B., Lv, Y., Wei, Y. J., Liu, X. L., Chen, J. Q., ... & Li, F. (2010). Comparing patterns of ecosystem service consumption and perceptions of range management between ethnic herders in Inner Mongolia and Mongolia. *Environmental Research Letters*, 5(1), 015001.
- [9] Lattimore, O., & Nachukdorji, S. (1955). *Nationalism and revolution in Mongolia*. Brill Archive.
- [10] Rafique, A. F., He, L. S., Zeeshan, Q., Kamran, A., & Nisar, K. (2011). Multidisciplinary design and optimization of an air launched satellite launch vehicle using a hybrid heuristic search algorithm. *Engineering Optimization*, 43(3), 305-328.
- [11] Fernández-giménez, M. E. (1999). Sustaining the steppes: a geographical history of pastoral land use in Mongolia. *Geographical Review*, 89(3), 315-342.
- [12] Foster, P. J., Baasanhu, J., Alsbirk, P. H., Munkhbayar, D., Uranchimeg, D., & Johnson, G. J. (1996). Glaucoma in Mongolia: a population-based survey in Hövsgöl Province, northern Mongolia. *Archives of ophthalmology*, 114(10), 1235-1241.
- [13] Edwards, D. P., Halvorson, C. M., & Gille, J. C. (1999). Radiative transfer modeling for the EOS Terra satellite Measurement of Pollution in the Troposphere (MOPITT) instrument. *Journal of Geophysical Research: Atmospheres*, 104(D14), 16755-16775.