

# ASSESSMENT OF THE NEW REGIONAL PLAN IN MONGOLIA WITH REGARDS TO RURAL DEVELOPMENT AND URBANIZATION ISSUES BASED ON ARKHANGAI AND UVURKHANGAI PROVINCES

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## Abstract

*This study discusses the relationship between the rural development process in Mongolia regards to its rapid urbanization issues.*

*This paper took Arkhangai and Uvurkhantai, two similar provinces, and compared their rural development from 2013 to 2021 to understand the complex relationship between rural development and urbanization issues. A chain-based method, fixed-based method as well as per capita methods were used to get more accurate results from the comparison. The results confirmed that ongoing rural-to-urban migration due to more access of education, workplace, etc. (due to its more attractive factors) slows down the development of such factors in that rural area, putting the whole process in a cycle. As for the two provinces, the infrastructure, education, health level is all similar, but their potential economic growth is specialized in two different sectors. Arkhangai has more agricultural products due to its land and soil resources and Uvurkhantai has more potential for the tourism sector. It can be concluded that the government's new plan of dividing the country into six regions with specialized enterprises would be a good idea for future rural development projects (previously there were only four regions existing).*

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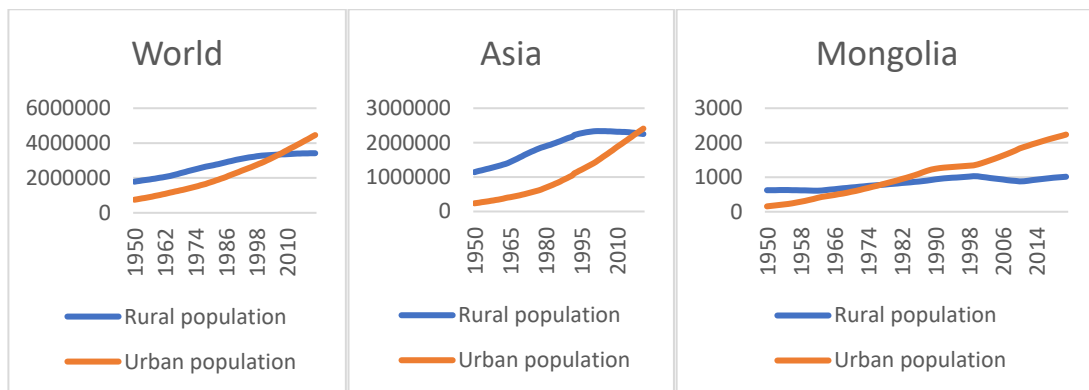
## 1. Introduction

Globally it can be said that geographical locations, differences in market enabling environment, education, and access to school, as well as roads and transportation systems are the main drivers of population migration.

Urbanization is fundamentally a process of urban development that can be identified with both urbanization and urbanism. Urbanization is the quantitative process of urban

development, during which not only the number of cities increases, but also the proportion and economic-cultural role of the urban population. In contrast, urbanism is the qualitative process of urbanization, manifested by a decrease in the difference between urban and rural areas – both economically and infrastructurally – an expansion of urban lifestyle, and an improvement in the living conditions of the rural population [13]. The extent of urbanization is closely related to the level of socio-economic development, historical factors, and indirectly to geographical conditions. The process of urbanization, on the other hand, is due to the simultaneous spread of two factors: the improvement of infrastructure and the dissemination of urban lifestyle and behavior patterns [14]. When examining the process of urbanization, it's worth asking the question of why people leave their rural residences and what attracts them to cities [14].

By looking at the global population, 2007 was the official date when the urban population grew larger than the rural population [1]. However, in Asia the date was much later, in 2018. Amongst the many countries in Asia, the largest population country, China, reported 2010 as the year their urban people had finally went over the number of their rural people [2]. For them the term, the slower the country shifts towards the more urban population, the more it gets the chance to continue developing at the same rate nation-wide, was true (*Figure 1*).



*Figure 1: Comparison between the rural and urban population since 1950 in three levels; world, Asia, and Mongolia (per capita)*

*Source: primary analysis using secondary source from FAOSTAT [2].*

Compared to them, Mongolia had shifted to more urban people much earlier, more specifically in 1977 [2]. But this does not particularly mean that our regions are equally developed. In fact, it's the opposite, where only the three major cities are considered urban, with a very dense population, and the rest of the country as rural. There are many articles and paper written on the comparison of regional development between Mongolia and the Inner Mongolia or with China, and they all conclude that China's regional policy has evenly distributed its people across the land and aimed for same development rate for all regions, meaning that more than half the land is now urbanized [3].

Naturally, migrations are there to fix disparities between regions given that the destination meets the migrators' needs such as employment and income opportunities. One of the EU's fundamental rights is the free movement of people. By allowing the EU citizens total mobility and having the member states implement a community level regional policy, they aim to reach the same level of development in each region inclusively [4]. However, if the migration is only towards the capital city for a long period of time, then it can lead to less improvement in both rural and urban areas. This issue is true for Mongolia. At first because of decreasing population and demand there was not much development needed for the rural areas and now there is again less development because of lack of work forces and unattractiveness of the area [5]. There are many articles about the Mongolian economy and how it is dependent on the animal products or about its urbanism or development compared

to China, but not articles about comparing two similar regions and its development affected by urbanism.

After the regime change in 1990 (from a former socialist state to a democratic one), the high amount of rural-to-urban migration has resulted in slower growth rate and development towards rural areas, and it is true even today. Before the communist era, Mongolians lived as a nomadic herder and then after the Soviet regime there had been herder cooperatives up until the late 20<sup>th</sup> century. But with the fall of the Soviet Union and liberalization from China's economy, communities started to see that the economy was changing to an industrial one and the urbanization movement began. With the already extreme environmental and cold, dry climate conditions making living conditions for herders difficult, economists and government had undervalued the possible increase rate of urban population through migration. The provision of social goods, such as education and healthcare, had decentralized, so more consideration was given towards the city development plan rather than the national regional plan. The income disparity between urban and rural areas has grown, and the new grassland management regulations have further sped up urbanization [6].

Unlike the EU, the government did not participate in the local level developments, so local administrative units did not have enough funding to build roads and buildings, thus the transportation and the overall country infrastructure had not been developed [7]. New companies and enterprises, who were the key economic developers, had no choice but to situate next to the already existing roads which would be the capital city. So, compared to its neighbor countries, such as in China, where there were new cities emerging and the people scattered across the land, in Mongolia there was rapid urbanization fixated only in the two to three major cities.

In Mongolia rural area is any area or region not included in the “urban” concept. And an urban area is a town with a national status (degree or grade) along with the role the given town plays in economic and social development of the country, it must also reach a certain level of urbanization and infrastructure development [8]. The nation is divided into 22 major administrative units, including 21 provinces and the capital city with only the three largest cities considered as urban and the rest as rural due to lack of developed infrastructure [5].

According to Peilei Fan, a researcher from the Michigan State University, a rural area has an economy consisting of the primary economic sector, including grazing and agricultural activities, while the urban area includes secondary and tertiary sectors, such as construction, manufacturing, and many types of services [3]. However, if we look at a more universal definition of rural, then it is a settlement with fewer than 5,000 inhabitants, according to the European Commission [1]. In my article I would define urban areas as cities and rural areas as anything other than a city.

As for funding the development plans, there are government funds and global funds available, for example Asian Development Bank for rangeland management, and Green Climate Fund (GCF) to reduce climate vulnerability of its rural economy.

Taking into consideration all these factors, in this study I have wanted to see how much urbanization has affected the development rate of different regions and sectors.

## **2. Material and methodology**

In Mongolia since 2001, following the Regional Development Concept adopted from the Parliament there had been four regions, however, after the documents expiring in 2020 and the need to implement new development agendas henceforward Mongolia was divided into six regions each with a different regional economic plan. And this paper will be following the six-region development plan (Figure 2 and 3).



Figure 2. Previous map of the macro-regions during 2001-2020.

Source: ResearchGate [9]



Figure 3. Map of the macro-regions, the new six regions

Source: National Development Planning [10]

This article discusses the still aftereffects of urbanization on the development of two similar rural areas, Arkhangai and Uvurkhangai provinces (Figure 4), with data from 2013 to 2021. A comparative analysis will help to explain to what certain level this statement is true.



Figure 4. Map of the 21 provinces

Source: Discovermongolia [11]

The two provinces are similar in the way that they are bordered next to each other, established in the same year, and have similar area and population density (Table 1). So, for the last two decades they have been in the same region, called the Khangai Region.

*Table 1. Properties of the two provinces*

Province's properties	Arkhangai	Uvurkhangai
Total area (km.sq)	55.3	62.9
Population	94994	116732
Density	1.72	1.86
Number of soum (districts)	19	19
Established year	1931	1931
Capital soum (district)	Tsetserleg	Arvaikheer

*Source: Statistical Office of Mongolia [12]*

However, their difference in physical attribute has determined its different development path.

- Arkhangai: forest-steppe. The agriculture sector dominates the economic activities of the aimag.
- Uvurkhangai: steppe, semi-desert. Well known for its tourist destination.

So, after the implementation of the new development plan since 2020, Arkhangai has been under the Khangai Region and Uvurkhangai under the Altai Region.

This study will be using chain base index, fixed base index and per 1000 people calculations to compare the provinces' different economies and will see if the new development plan will help fasten the rural development or not.

### 3. Result

The remainder of this paper is written as follows. First, the demographics, population growth with chain-base index, then the change in economic sector through the herders' size and the sown area size with per capita and fixed-base chain method respectively. Third, the economic development by looking at the total trade turnover, income of hotels, and number of enterprises. Finally, it focuses on the number of migration rate per 1000 people.

One of the most important factors in rural development is the human factor, including the well-being (health) of the citizens and the increasing demographics to raise production level (Table 2).

*Table 2. Population growth comparison with chain base index*

Provinces	Uvurkhangai	Chain base index	Arkhangai	Chain base index
2013	100,751		85,149	
2014	112,591	112	92,896	109
2015	111,907	99	91,760	99
2016	113,911	102	93,509	102
2017	115,684	102	94,923	102
2018	116,645	101	95,994	101
2019	115,737	99	94,324	98
2020	116,785	101	95,067	101
2021	117,261	100	95,867	101

*Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].*

The positive and negative motion of growth occur at the same time for both settlements. By providing additional data on crude birth rate, we can see that the reason behind the drop in population growth of 2015 was due to low birth rate. However, regarding the population growth decrease in 2019, even though there was an exponential increase in birth rate, could be explained by another factor which is the number of increasing out-migration during that year (Table 3).

*Table 3. Crude birth rate comparison with chain base index*

Administrator unit	Uvurkhantai	Chain base index	Arkhangai	Chain base index
2013	27.3		24.8	
2014	28.8	105.4945	29	116.935
2015	24.5	85.06944	22.2	76.5517
2016	25.1	102.449	24	108.108
2017	22.4	89.24303	23.7	98.75
2018	23.8	106.25	23.7	100
2019	25.6	107.563	24.1	101.688
2020	23.9	93.35938	23.7	98.3402
2021	20.9	87.4477	22.2	93.6709

Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].

The number of persons per 1000 people choosing to out-migrate is around the same for both provinces. And for both provinces the number of out-migration is far greater than the in-migration (Table 4).

*Table 4. Population migration with per 1000 people calculated.*

Statistical indicator	Out-migration				In-migration	
	Aimags	per 1000	Aimags	per 1000	Arkhangai	Uvurkhantai
<b>2013</b>	1,706	20	3,365	33	637	780
<b>2014</b>	2,337	25	3,121	28	570	762
<b>2015</b>	1,706	19	2,639	24	637	849
<b>2016</b>	1,226	13	2,316	20	667	1,049
<b>2017</b>	744	8	1,053	9	1,022	1,152
<b>2018</b>	767	8	784	7	846	782
<b>2019</b>	1,145	12	1,466	13	629	619
<b>2020</b>					482	620
<b>2021</b>					627	797

Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].

So far, all the human factors such as well-being, population growth have been the same for both provinces. Then, now let us look at the differences in their economic sectors.

First, the agricultural sectors. Even though the number of herders alone is increasing gradually if we compare it to the increasing population then the actual herders' size is decreasing. (Table 5). As for the agricultural land, the 2021 total sown area for both is similar but Arkhangai has had the biggest increase, more than 4 times from the base year 2013 (Table 6). Arkhangai has more potential because it has about 45 square miles of arable land

used for growing cereal, potatoes, and other kinds of vegetables. Local farmers harvest over 20,000 tons of grain annually.

*Table 5. Comparing the number of herders per 1000 people*

Aimag	Uvurkhangai	herders per 1000 people	Arkhangai	herders per 1000 people
2013	26,254	261	26,151	307
2014	27,580	245	26,591	286
2015	28,446	254	26,915	293
2016	29,993	263	27,474	294
2017	28,265	244	27,055	285
2018	28,103	241	25,756	268
2019	27,101	234	25,688	272
2020	28,333	243	25,907	273
2021	28,257	241	27,017	282

Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].

*Table 6. Total sown area (unit: ha), compared with fixed base rate (base year: 2013)*

Aimag	Uvurkhangai	fixed base index	Arkhangai	fixed base index
2013	4,340.01	100	3,612.14	100
2014	4,527.59	104.32	4,643.31	128.55
2015	7,276.18	167.65	7,585.04	209.99
2016	11,521.47	265.47	7,935.17	219.68
2017	10,965.91	252.67	11,522.44	318.99
2018	9,986.83	230.11	10,619.72	294
2019	10,907.71	251.33	11,303.61	312.93
2020	11,378.28	262.17	14,390.39	398.39
2021	15,981.40	368.23	15,639.20	432.96

Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].

As for the total trade turnover, Uvurkhangai has a much bigger economy but if we compare it to their base year then Arkhangai has increased its total sales higher than that of Uvurkhangai (Table 7).

*Table 7. Total trade turnover (unit: million tugrik), compared with fixed base rate (base year: 2013)*

Aimag	Uvurkhangai	Fixed base index	Arkhangai	Fixed base index
2013-I	6,710.10	100	4,000.70	100
2014-I	7,869.60	117.2799	6,104.80	152.5933
2015-I	11,316.10	168.6428	6,569.60	164.2113
2016-I	12,901.00	192.2624	6,992.90	174.7919
2017-I	16,380.40	244.1156	12,289.40	307.1812
2018-I	24,151.90	359.9335	16,049.60	401.1698
2019-I	29,131.40	434.1426	18,683.70	467.0108
2020-I	33,415.40	497.9866	21,166.10	529.0599
2021-I	36,684.70	546.7087	25,005.30	625.0231
2022-I	50,272.80	749.2109	31,579.00	789.3369

Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].

Now, for the tourist sectors we can compare the income of hotels. Uvurkhangai has the advantage due to its famous tourist attraction sites. From the table we can see that their income from hotels is much higher than Arkhangai's (Table 8).

*Table 8. Income of Hotels (unit: million tugrik) with chain base index*

Aimag	Uvurkhangai	chain base index	Arkhangai	chain base index
2013-I	99		51	
2014-I	215.9	218.0808	92.9	182.1569
2015-I	166.6	77.16535	84.5	90.95802
2016-I	119.9	71.96879	66.3	78.46154
2017-I	236.9	197.5813	59.4	89.59276
2018-I	301.6	127.3111	42.2	71.04377
2019-I	296.3	98.24271	96.7	229.1469
2020-I	327	110.3611	103.7	107.2389
2021-I	452.5	138.3792	105	101.2536

Source: primary analysis using secondary source from the Statistical Office of Mongolia [12].

Lastly, the comparison between the number of enterprises by province and by the employment size. The only sector where Arkhangai's number of enterprises per person is below Uvurkhangai's is at this class: 10-19 SMEs (Table 9).

*Table 9. Number of enterprises by province and by employment size class*

employment size class	1 to 9 (small enterprises)		10 to 19 (SMEs)	
Aimag	Arkhangai	Uvurkhangai	Arkhangai	Uvurkhangai
2013-IV	565	657	82	119
2014-IV	731	840	86	114
2015-IV	756	827	107	138
2016-IV	796	933	109	140
2017-IV	755	888	89	125
2018-IV	739	1,100	85	141
2019-IV	804	1,167	90	142
2020-IV	635	968	72	143
2021-IV	642	759	67	124
2022-IV	684	789	67	126

employment size class	20 to 49 (medium enterprises)		50+	
Aimag	Arkhangai	Uvurkhangai	Arkhangai	Uvurkhangai
2013-IV	72	77	34	32
2014-IV	70	79	35	32
2015-IV	78	83	36	38
2016-IV	78	85	36	38
2017-IV	77	82	36	39
2018-IV	89	112	40	38
2019-IV	95	113	44	43
2020-IV	97	107	40	51
2021-IV	102	115	39	48
2022-IV	101	114	38	47

Sources: primary analysis using secondary source from the Statistical Office of Mongolia [12].



This is probably the tourism and hotel services sector, thus the lower number. After taking into consideration their different population, the total number of enterprises per person for Arkhangai is higher than Uvurkhangai as for 2021.

By looking at the comparative analysis, one can suggest for Arkhangai, its total trade turnover was higher than Uvurkhangai's, so focusing more on crop production, building more food industries and SMEs is ideal. As for Uvurkhangai, it should develop its service sector more. For example, building spa resorts, hotels, and entertainment.

## 4. Conclusion

The aim of the study was to examine the process of rural development in Mongolia in light of the country's rapid urbanization challenges. The study focused on two similar provinces, Arkhangai and Uvurkhangai, comparing rural development between 2013 and 2021 to understand the complex relationship between rural development and urbanization issues. To achieve a qualitative, quantitative, and consistent analysis, we employed chain- and base-, as well as intensity ratio formation methods, allowing for comparability between both provinces and each individual region.

With the earlier development plans focused on urban areas, the development of rural areas has lagged, and its effects are still lasting, shown by the increasing out-migration and slow economic growth from the 2013 till 2020 period. Therefore, the governments' new plan of developing six different specialized enterprise of settlements is the best way to quicken rural development. As for the study area of this article, both provinces share multiple similarities and are in par with each other but the sectors they should specialize in are different, therefore they are grouped in different regions as of 2020.

## References

- [1] Our World in Data (2023): Urbanization <https://ourworldindata.org/urbanization>
- [2] FAOSTAT (2023): Statistical data. <https://www.fao.org/faostat/en/#data/OA>
- [3] Peilei Fan (2015). Urbanization and Environmental change during the economic transition on the Mongolian Plateau: Hohhot and Ulaanbaatar. <https://doi.org/10.1016/j.envres.2015.09.020> (Environmental research, volume 144, part B, January 2016)
- [4] EC (2022): European Commission Charter of Fundamental Rights. [https://commission.europa.eu/aid-development-cooperation-fundamental-rights\\_en](https://commission.europa.eu/aid-development-cooperation-fundamental-rights_en)
- [5] UN report (UNDP) (2003): Human Development Report, Mongolia [https://planipolis.iiep.unesco.org/sites/default/files/ressources/mongolia\\_hdr\\_2003\\_en.pdf](https://planipolis.iiep.unesco.org/sites/default/files/ressources/mongolia_hdr_2003_en.pdf)
- [6] Hogeun Park (2017). Urbanization on the Mongolian Plateau after economic reform: Changes and causes. <https://doi.org/10.1016/j.apgeog.2017.06.026> (Applied Geography, volume 86, September 2017)
- [7] Mongolia's National Report (2015) "MANAGING THE TRANSITION FROM THE MILLENNIUM DEVELOPMENT GOALS TO THE SUSTAINABLE DEVELOPMENT GOALS" [https://www.un.org/en/ecosoc/newfuncnt/pdf15/nvp\\_mongolia\\_report.pdf](https://www.un.org/en/ecosoc/newfuncnt/pdf15/nvp_mongolia_report.pdf)
- [8] Mungunegshig Erdenechimeg\*, Erdenebat Tuvshintur and DONG Wei. (2018). IJSIT(International Journal of Science Inventions Today), 7(3), 368-385 [http://ijsit.com/admin/ijsit\\_files/RESEARCH%20ON%20GER%20AREA%20INFORMAL%20SETTLEMENT%20REDEVELOPMENT%20PLANNING%20OF%20ULAANBAATAR%20MONGOLIA\\_IJSIT\\_7.3.4.pdf](http://ijsit.com/admin/ijsit_files/RESEARCH%20ON%20GER%20AREA%20INFORMAL%20SETTLEMENT%20REDEVELOPMENT%20PLANNING%20OF%20ULAANBAATAR%20MONGOLIA_IJSIT_7.3.4.pdf)
- [9] Daariimaa Khurelbat (2020). A cross-sectional analysis of falsified, counterfeit, and substandard medicines in a low-middle income country. BMC Public Health. 20. 10.1186/s12889-020-08897-x. <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-08897-x>
- [10] Mongolian news website (2023). <https://montsame.mn/en/read/214091>
- [11] Discovermongolia (2024). <https://www.discovermongolia.mn/about-mongolia/people-society/administrative-territorial-units-Mongolia>
- [12] National Statistical Office of Mongolia <https://www.1212.mn/en/statistic/file-library/view/47811760>
- [13] Nagy Zoltán (2018). Közlekedésföldrajz. Akadémiai Kiadó, ISBN 978 963 454 279 7, Budapest
- [14] Mizik Tamás (2018). AGRÁRGAZDASÁGTAN II. Az agrárfejlesztés mikro- és makroökonomiája, ISBN 978 963 454 187 5, Budapest