DECREASING POPULATION AND THE HUMAN RESOURCE BASE IN THE GOBI SUB-REGION: CHALLENGES FOR MONGOLIA IN THE 21st CENTURY

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Abstract

Mongolia is one of the most sparsely populated countries in the world. It has a vast territory with few inhabitants. The Gobi sub region in the south of the country is the core region for the mining industry which is central to Mongolia's economic development. It is sparsely populated compared to other regions yet it remains a critical region. According to data collected over the last decade, the number of people leaving the Sub region is in excess of incoming migration. However, the demand for labour is high, the labour supply is shrinking. This paper explores this dichotomy by examining the demography and human resource base of four provinces (aimag) that make up the Gobi sub-region. The paper examines topical issues and constraints facing labour market demand in contrast to supply, the cause of these issues and constraints and possible remediation measures to address this dichotomy. We explore data and indexes covering the labour market as a sector taking account of population growth and migration over 2007-2017 and likely population growth until 2030. It will be seen that the Gobi sub-region population is decreasing yearly and this results in a shrinking labour market for the foreseeable future.

Key words: Size of Labour Force, Workforce, Unskilled, Employment, Labour Mobility

JEL Code: J21, J24, J61

Introduction

Since mid-2009, Mongolia has experienced a period of rapid economic growth resulting in double digit GDP annually. This growth spurt has been driven by major infrastructure programs including a 'boom' in the construction industry and property development, road construction, an overall expansion of the national road network, mining and mine operations and the many support industries that act as a feeder system for those economic and industrial sectors experiencing the most growth.

In late 2012, the Mongolian economy was expected to expand by 18%. Owing to a slowdown in the economy of PR China over 2013 - a major export market for Mongolia - this expansion was reduced to 13%. The high economic growth has been driven by significant increases in exports of 78% and mineral extraction of 60%. Mongolia today has entered another period of economic growth with GDP rising to 6.9% in 2018. These indicators are interesting but do not reflect the huge demands these fluctuations make upon the nation's human resource development base. On the ground, these fluctuations fail to illustrate pressing concerns involving an over-supply of poorly trained labour in sectors with an abundant supply of labour and an under supply of technicians and professionals in economic sectors central to the nation's economic growth and well-being (Tsetsegmaa & Duggan, 2018).

The Mongolian parliament approved a Regional Development concept in 2001 and Regional Development Management and Regulation bills in 2003. Despite this support, there are challenges concerning the absence of a central regional division in Mongolia. The National Statistics Office sums up statistical bulletins in 5 regions of Mongolia (Western, Northern/Khangai, Central, Eastern, and Ulaanbaatar (Image 1). Gobi sub-region is within the Central region and consists of Gobisumber, Dornogobi, Dundgobi and Umnugobi aimags located in the south eastern part of Mongolia.

Fig. 1: Economic regions of Mongolia

Resource. National statistical office of Mongolia, www.nso.mn

Gobi sub-region is a central pillar for mining sector development. It is a critical economic region of Mongolia. For instance, there are Tavantolgoi, Oyu Tolgoi and Nariin Sukhait, three biggest strategically significant mining fields are found in the region.

It includes another 14 companies operating active in mining the sector such as: Erdenes Tavan Tolgoi JSC, Energy Resources LLC, Munkh Noyon Suvarga LLC, Dung Yuan LLC,

Olon Ovoot Gold LLC, Zuv Zuv LLC, MAC LC, Chinghua-Mac Nariin Sukhait LLC, South Gobi Sands LLC, Osokh Zoos LLC, Terra Energy LLC and Javkhlant Ord LLC[1].

Demographic proportions across economic region in total population of Mongolia is as follows: Western region 12.6%, Khangai region 18.7%, Central region 15.9%, Eastern region 6.8% and 46.1% in Ulaanbaatar city. As Gobi sub-region is part Central region, population proportions of each aimags in the region are: 3.5% in Gobisumber aimag (GSA), 13.5% in Dornogobi (DoGA), 9.1% in Dundgobi (DuGA) and 13.0% in Umnugobi (UGA) aimag.

1. Employment Statement of Mongolia

The employment rate and supporting policy are the centermost society issues for every country. In Mongolia, 58 % of the population are people under 30, 21 % of this group aged between 15-24 has been encountering a "Demography window" since 2010 which it is estimated will continue until 2020. According to a report on the General statement of Employment 2015, for countrywide, 63.8 % of registered unemployed youth which is 23.8 thousand, are in the age group 15-34[2]. For this reason, government policy towards employment must be reasonable and wise. The rational and effective use of the "demographic window" period depends on state policy regarding employment, including youth employment (Tsetsegmaa, 2015).

As reported in 2018, 64% of the Mongolian population is under 35 along with the fact that the working age population share is 61%. The working age population is expected to grow further. The 15 years olds and older population has increased on average by 21,300 annually over 2013-2018. It then rose to 35,100 people over 2019-2023 (Institute for Labour Studies of Mongolian, 2014).

Numerous international research on developed countries, especially European Union countries, reveals a high ageing population, and lack of labour resources and this trends will be sustained. Population ageing is not confined to European or to industrialised countries alone. Together with Japan, Europe is clearly most advanced in the process, and is most acutely in need of reforms to counteract negative long-term consequences of demographic change (James, Vaupel, & Kistowski, 2008).

In Mongolia there are ongoing projects and programs to create new workplaces to reduce unemployment among young people, in other countries, their governments continue to pay attention to the older employees and maintain their ability to work over the long term. There is a lot of research publications and reports comparing changes and projections related to ageing

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[1] "Natural resources - Good governance - Developed Umnugobi" - Development program
[2] Ministry of Labour, Report on General statement of employment for 2015

and labour market issues in European members' countries. A 1994 EU summit was the first to underscore the need to improve employment opportunities for older workers (European Commision, 2014). The age composition of the EU-27 population is going to change significantly.

The most pronounced changes are predicted in the share of old-age and working-age groups across the population. A significant decline in the share of people between 15 and 64 is predicted (from 67 % in 2010 to 56.2 % in 2060) (European Commission, 2018). The old-age dependency ratio (people aged 65 and above relative to those aged 15 to 64) in the EU is projected to increase by 21.6 points over the projection period, from 29.6% in 2016 to 51.2% in 2070 (European Commision, 2014). Overall, the working-age population is projected to decline the most, a decline in the population aged 20-64 by about 30% by 2050 (Stehrer & Leitner, 2019). According to these research results, we can observe this trend of potential lack of labour resource due to population ageing in EU countries.

In Mongolia, unemployment rates differ relatively less in regional scale. In 2018, national rate of unemployment was 7.8%, with 8.9% in the Western region, 7.1% in the Khangai region, 7.6% in the Central region, 8.7% in the Eastern region and 7.6% in Ulaanbaatar city. Hence, it is necessary to discuss the significant contrast of unemployment rates in Gobi sub-regions. In comparison with the Czech Republic, the picture is quite the similar as in Gobi sub-regions of Mongolia. Regions with a high rate of distraints in the adult population show a high rate of total unemployment, such as in the Karlovarský, Ústecký, Moravskoslezský and Liberecký regions (Pavelka, 2017).

In 2018, the national youth unemployment rate is high, especially among those aged 15-24, is 20.4% which is matter of concern. Countries around the world are focusing on improving youth employment and reducing high rate of unemployment. In particular, the European Union aims to reduce youth unemployment and increase the youth employment rate in accordance with the main EU target of achieving a 75% employment rate for the working-age population (Paliskova, 2017).

Studying the causes and consequences of unemployment, especially youth unemployment, as well as the development and implementation of effective policies to reduce it have become one of the most pressing social problems in every country. Recently, some researchers of University of Basel from Switzerland took a factorial survey that how unemployment scaring affects skilled young workers concluded that unemployment decreases the perceived suitability of an applicant for a specific job, which implies there is a scarring

effect of unemployment that increases with the duration of being unemployed (Shi, Imdorf, Samuel, & Sacchi, 2019). Their assumption and survey results should be considered when developing policy for youth employment in our country.

2. Current situation on labor sector in gobi sub-region

The Mongolian population hit 3.2 million in 2017. It has grown approximately 4.3 times in last 82 years and grew by 4% each year since 1935. However since 1991, national and regional migration and demographic pattern haves significantly shifted. That is, between 1991 and 2017 the Mongolian population has grown by 5.6% each year in average. The growth rate was around 1 % in the Gobi sub-region. Among the Gobi aimags, Gobisumber's population average shift rated as 1.6%, 1.7% in Dornogobi, -0.5% in Dundgobi and 1.8% in Umnugobi aimag (Mongolian National Statistical Office, 2019).

In addition, demographic indexes are showing that the Gobi sub-region population proportion in national total population is declining each year. For example, the proportion of Dundgobi population in Mongolian population was 2.4% in 1990, 2.1% in 2000 and dropped to 1.4% in 2010. It is estimated to be 1.4% in 2020, 1.3% in 2030 and shrink to 1.2% in 2040. In other regions and aimags' demography indexes are relatively higher than the Gobi region.

Fig. 2: Population proportion of Gobi sub-region in total Mongolian population
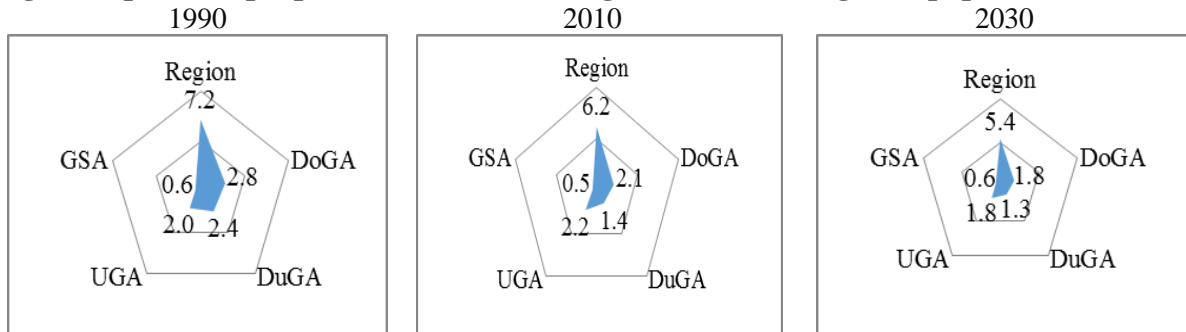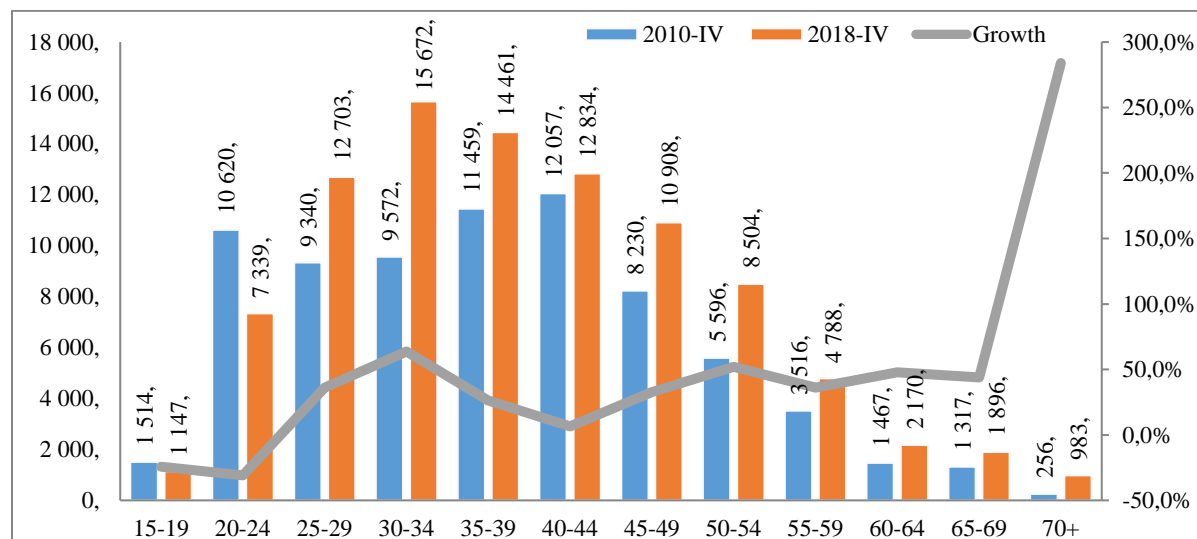

Resource. Research team assumption based on statistical data

The average population density index of concerning 4 aimags and 47 soums is 2.7, that is 0.7 points higher than national average density of 2.0 points. In the last 27 years, the proportion of population aged 15 and older in Gobi sub-region in national scale was at 7.2 in average. The trend of decline has persisted since 2001. For the same indexes in each aimags as follows: in 2017 rate was 2.5% in Dornogobi, 2.0% in Umnugobi, 1.8 % in Dundgobi and 0.6 % in Gobisumber.

Within last 8 years, from the fourth guarter of 2010 fourth quarter to that of 2018, we studied the varation of population at age 15 and over nationwide and compared the rate concerning the four gobi sub-region aimags. In this timeline, population groups in age group of

15-19 and 20-24 decline at 4.6 and 26.7% in nationwide, whereas population group aged over 25 grew in the majority of aimags. (Fig. 3).

Fig. 3: Variation of labour age population group (age over 15) in Gobi sub-regions, between 2010 to 2018

Source. Research team assumption based on statistical data

As shown since 2010, the figure of labour age population group over 15 in Gobi sub-region scaled up most in sectors, such as hired household activities (by 149.1%), arts, entertainment, performance shows (59.0%), specialised scientific and technical activities (58.3%). Nonetheless, the figure dropped in the sectors of international corporation and official representative offices within the same period.

Nationwide and the Gobi sub-regions, the unemployment rate trended to decline until 2008, the rate rose up by approximately 7 points in 2009. After 2009, the unemployment rate decline back in most aimags except Umnugobi, which has growing unemployment since 2013.

Comparing labour sector indicators in the Gobi sub-region to national scale, each labour force participation and the employment rate are above by 10 and 8.9%. However, the unemployment rate is 0.3 points less than national rate. Taking the last decade since 2007, the unemployed population in the Gobi sub-region grew by 5.8 times and unemployment rate grew 4.34 times. Umnugobi aimag has the highest rates in unemployment and unemployed population in same period (Mongolian National Statistical Office, 2018).

Tab. 1: General labour indicators and their changes from 2007 to 2010

Labour sector general indicators	National total	Gobi region	Govisumber	Umnugobi	Dundgobi	Dornogobi

	2017	Δ	2017	Δ	2017	Δ	2017	Δ	2017	Δ	2017	Δ
Population group of aged over 15, thousand ppl	2,220	1.35	133.7	1.31	11.2	1.30	44.0	1.53	30.5	1.00	48.0	1.40
Economically active population, thousand ppl	1,357	1.29	95.1	1.35	7.7	1.77	30.3	1.35	23.7	1.00	33.4	1.66
Employed population, thousand ppl	1,238	1.21	86.5	1.25	7.1	1.70	25.3	1.14	22.6	0.98	31.4	1.59
Unemployed population, thousand ppl	119	3.98	8.6	5.84	0.6	3.68	5.0	14.66	1.0	1.76	2.0	5.26
Economically passive population group, thousand ppl	863	1.47	38.6	1.22	3.5	0.82	13.7	2.16	6.8	0.99	14.6	1.04
Labour force participation, in %age	61.1	0.95	71.1	1.03	69.0	1.36	68.8	0.88	77.6	1.00	69.7	1.18
Employment rate, in % age	55.8	0.89	64.7	0.96	63.6	1.30	57.5	0.75	74.2	0.98	65.5	1.13
Unemployment rate, in % age	8.8	3.09	9.1	4.34	7.8	2.08	16.4	10.89	4.4	1.75	6.1	3.17

Explanation: Δ indicates times of growth since 2007 until 2017
Source: Research team assumption based on statistical data

In Umnugobi aimag, despite the growth in labour force demand, unemployment and unemployed population is increasing due to labour shortages in skilled labour, people not interested in working, lack of professional jobs for university graduates, high salary expectation and so on.

Examining workplace offers in the Gobi sub-region, 2016 had the lowest rate over the last four years. It dropped by almost 50% compared to the previous year. It grew by 11.4 % (494) in 2018 from previous year. Among the aimags, the workplace offerings grew by 36.4 % (585) in Umnugobi, 72.2 % (268) in Gobisumber and dropped by 29.9 % (254) in Dundgobi in 2018 statistics compared to 2017.

Conclusion

Mongolia has a small population that relatively young amongst labour resources. Most of the Mongolian population are aged up to 35 and this age group covers 60% of registered unemployed. The unemployment rate is keeping its way up in the global range and particularly young unemployed people are carrying a comparably high weight.

Taking account of changes in demography and labour indicators over the last 10 years, employment and labour market conditions in the Gobi sub-region differed relatively. Over the in last 3 years in the Gobi sub-region, the labour market balance was lost and this resulted in lack of labour force supply in every aimag alongside a decreased rate of job place usage.

The proportion of Gobi sub-region population in the national scale downturned and out migration is higher than inward migration in target aimag. Such conditions is determining labour resource shrinkage in the Gobi region. In the last decade, the hike in the unemployment rate and unemployd population in Umnugobi aimag has affected an enormous increase in unemployment (at 4.34 times) and the unemployed population (at 5.8 times) across the Gobi sub-region. Our assumption demonstrates potential loss of labour market balance, lack of labour supply in each aimag of the Gobi sub-region and a decline in the workplace usage rate.

Acknowledgment

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