

INTERNAL MIGRATION IN MONGOLIA: A CASE STUDY

Mongolia is one of the poorest countries in Asia. It is a land of natural contrasts comprising large areas of rolling steppe, a continuation of the Siberian alpine meadows to the north, snow-capped mountains in the west and the vast Gobi desert in the south. Sandwiched between Russia and China the country covers 1.5 million sq km, an area six times the size of the UK. Mongolia is divided into 21 provinces (aimags) (Figure 1). About 80% of the country lies above 1000 metres. It has a population of only 2.7 million, 40% of whom live in the capital city, Ulaanbaatar. Few countries exhibit such a high level of urban primacy. The rest of the population is spread over vast, often inaccessible areas. Here, movement associated with herding is the norm.

Periods of Migration

Internal migration has been a recurrent theme in Mongolia. It is possible to identify four periods of internal migration during the last century, as the country developed into a modern nation.

1. The pre-industrial period

Throughout its history Mongolia has been a region of nomadic people, mainly herders moving in search of new pastures. As 90% of the country is classed as dryland, herds can graze land very quickly, necessitating movement. Such 'survival migration' was largely governed by climatic conditions. Until the 1950s there was no rapid urban development. Thus, Mongolia's urbanisation process is relatively young.

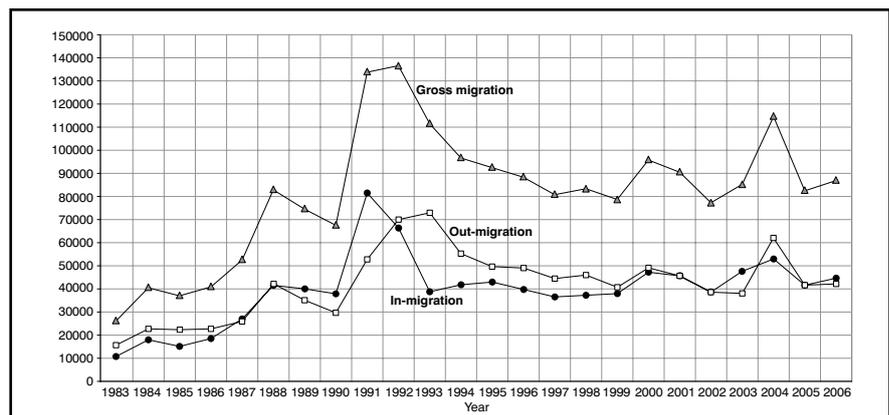
2. The development of central planning and the establishment of urban-industrial areas

During the years of a Soviet-influenced centrally planned economy, urban-industrial areas were established and the proportion of the population living in urban areas increased significantly. Migration was controlled by the government and associated with employment opportunities, as it was in other centrally planned economies such as the Soviet Union and China. From 1956 to 1969

Figure 1: Mongolian aimags



Figure 2: Internal migration trends, 1983–2006



Source: Migration registers 1983–2006, State Civil Registration Bureau.

the urban population increased threefold, while the rural population increased by only 10%. The building of railways was a significant factor in population movement, as thousands of people were attracted to newly established towns along rail routes. In the mid-1970s Mongolia became more urban than rural, with the focus of growth on the capital city Ulaanbaatar and the newly established urban-industrial centres of Darkhan and Erdenet.

3. Reverse migration following the collapse of the Soviet Union

The collapse of the Soviet Union, and with it the withdrawal of subsidies from that country, followed by Mongolia's transition to a market economy, brought about considerable changes. Part of the industrial sector (that which was relatively inefficient and could

not compete in the global market) and the agricultural collectives disappeared. With freedom of movement enshrined in the Constitution of 1992, a period of reverse migration flow from urban to rural areas occurred, with the rural economy, mainly the herding sector, absorbing excess labour. The privatisation of livestock was an important incentive for many people. The problem here was that the productivity of the herding sector is low, offering a poor economic quality of life. Also, as more people looked to herding for a living, the problem of overgrazing became more serious.

4. Renewed rural-urban migration

Rural life in Mongolia is subject to considerable extremes, which in recent years has led to renewed rural to urban migration as more

and more people look for a better life in urban areas, particularly in Ulaanbaatar. This migration has occurred in an uncontrolled manner, in contrast to the rural to urban migration during the central planning era. Figure 2, illustrating internal migration trends between 1983 and 2006, shows that the mobility of Mongolia's population has been increasing, albeit with considerable variations.

Data for 2000 and 2005 in particular show that most aimags lost population, in contrast to the very large gains in population in Ulaanbaatar. The heaviest population losses were in the west, followed by the Central region. On a regional scale, only Ulaanbaatar experienced a net gain of migrants over the period 1990–2005, with all other regions recording net losses. Because of the weak infrastructural situation in most rural areas in Mongolia, and the absence of income-alternatives to herding, rural to urban migration is likely to continue.

There is some evidence of step migration, with migrants from further afield moving to the Central region first, before later moving on to Ulaanbaatar. This has been particularly so with regard to Tov aimag. This aimag is the closest to the capital city, and clearly forms a temporary destination for some migrants before they subsequently move to Ulaanbaatar. The availability of employment and accommodation and the cost of the latter are the prime causal factors in this step migration.

Figure 3 shows the extent to which urbanisation has increased in the latest migration phase. In 1990 the percentage of the total population recorded as urban was 54.6%. By 2000 this had increased to 57.2%, reaching 61.0% by 2007. This is a very high level of urbanisation for a developing country.

Extreme weather

Much of the recent rural-urban migration has been associated with the impact of extreme weather conditions. Mongolia is one of the most vulnerable regions in the world to climate and land use change. Mongolia's harsh climate has always presented its people with problems:

- The mean monthly temperature is below 1°C over the whole country between November and March.
- Late spring and early autumn frosts leave a short growing season of 80–100 days in the north and 120-140 days in the south.
- The average annual precipitation is only 251mm, ranging from 400mm in the north to less than 100mm in the Gobi Desert.
- Precipitation is very unevenly distributed over the year, with 80–90% of annual rainfall occurring between June and August.
- Strong winds in spring result in high evaporation and soil erosion.
- Low soil moisture and air humidity in spring and early summer impact adversely on agricultural production.

With such extremes of climate and environment, Mongolia is very sensitive to climate change (Figure 4). Climate research has shown that the rate of change over the last 40 years is greater than the country has ever experienced before. Mongolian scientists say that the average temperature has increased by over 1.9°C since 1940. Since then, 9 of the 10 warmest years have occurred after 1990. The trend in precipitation is also worrying. During the 10 years to 2008, only one year recorded above-average precipitation. This is of great concern in a country that has large areas of desert and semi-desert. In general, winter precipitation is increasing and summer precipitation is decreasing. As most of Mongolia's precipitation falls during the summer, this trend is very disturbing.

The occurrence of droughts is increasing, resulting in depletion of water resources. A 2008 UN report quotes a recent water resources inventory in Mongolia which found that compared with previous knowledge, 22% of rivers and springs and 32% of lakes and ponds have dried up or disappeared. In addition the area without grass has increased while the forest area has decreased. According to some data sources 70% of grassland has been affected by desertification. Dust and sand storms are on the increase.

The spring season is becoming drier, causing decreased plant biomass production and later plant onset in some parts of the country. Pasture productivity and capacity are decreasing year by year. Degradation of the rural environment has resulted in very significant migration to Ulaanbaatar. This is an example of 'the tragedy of the commons'. While animals are private property, rangeland is state property. Thus, herders are inclined to think short-term rather than long-term when their herds are grazing.

About a third of the population live as nomadic herders on sparsely populated grasslands. In recent years, droughts and unusually cold and snowy winters have decimated livestock, destroying the livelihoods of hundreds of thousands of households. Many have moved to Ulaanbaatar where they live in impoverished conditions. In the last decade Ulaanbaatar's population has risen from 800,000 to 1.1 million. Arrivals have peaked in the wake of harsh winters. More will continue to arrive as the consequences of 2009/10 continue to play out. Some destitute herders move to smaller towns first,

Figure 3: Urban and rural populations of Mongolia, 1990–2007

	Total population ('000)	Urban population (%)	Rural population (%)
1990	2149.2	54.6	45.4
2000	2407.5	57.2	42.8
2003	2504.0	58.5	41.5
2004	2533.1	59.1	40.9
2005	2562.3	60.2	39.8
2006	2594.8	60.9	39.1
2007	2626.6	61.0	39.0

before realising that no work is available and then they head for the capital city.

Herders are living under direct risk of adverse environmental conditions. In a recent survey over 97% of the herders interviewed considered climate change and environmental change a reality in their area. The environmental conditions they referred to were:

- heavy snowfall
- reduction of drinking water
- frequent drought and dzud (severe winter) events
- drying up of rivers and springs
- reduction in hay-making yield
- reduction of feeding value of pasture land
- sand movement and intensification of desertification.

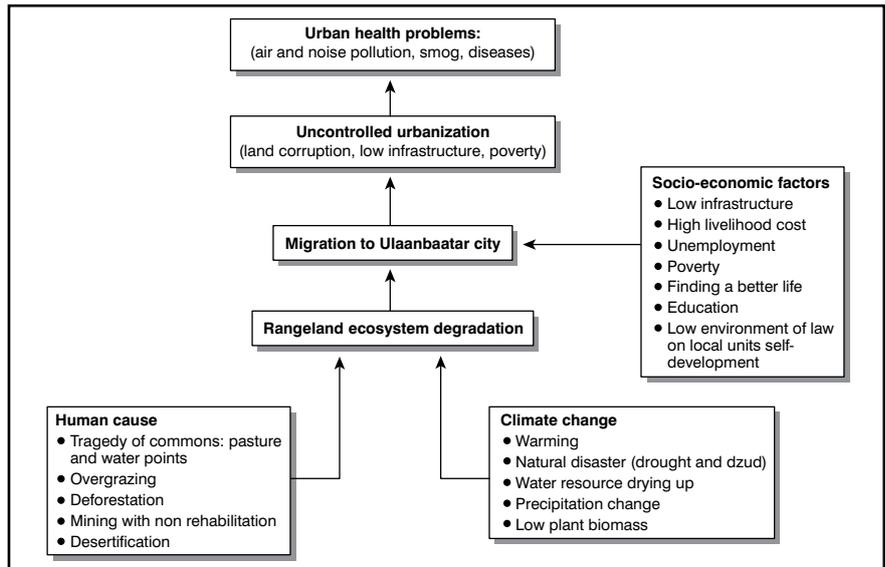
Herders also commented on a fall in the number of forage plant species, animal fatness and bodyweight, and consequently a decrease in the production of meat and milk as well as wool, cashmere and moult hair.

The devastating ‘Dzud’ of the winter of 2009/10

An article in the *Guardian* newspaper in July 2010 was entitled ‘Mongolia: How the winter of “white death” devastated nomads’ way of life.’ The article described what had happened as a result of the severe winter that had ended about four months previously. In Mongolia a very severe winter is known as a ‘dzud’ (‘white death’). During this dzud, temperatures fell to below -50°C, with thick snow covering large areas. By the time the snow finally melted, in May, 9,000 families had lost their entire herds to either the cold or starvation. Another 33,000 families lost half their livestock.

In total, almost 10 million cattle, sheep, goats, horses, yaks and camels died. This was a fifth of the country’s total livestock. The financial loss has been estimated at £250 million. The devastating winter of 2009/10 had been preceded by a dry summer and was followed by an unstable spring, with snowstorms and temperatures well below average. The International Federation of Red Cross and Red Crescent Societies launched an emergency appeal in March 2010 to help those impoverished by the situation.

Figure 4: Environmental unsustainability in Mongolia



Source: Davaanyam Surenjav, ‘Dry rangelands ecosystem degradation, migration, uncontrolled urbanization and urban health in Mongolia’, Paper Presented at United Nations University Institute for Environment and Human Security (UNU-EHS) Summer Academy on Environmental change, migration, & social vulnerability. Hohenkammer outside Munich, Germany. July 27th-August 2nd 2008

The growth of Ulaanbaatar

Mongolia has a very unbalanced urban system with a very high proportion of public and private investment focused on Ulaanbaatar. In spite of this it is a small city compared to the capitals of other Asian countries, due to Mongolia’s very limited population size. The capital city dominates the country’s economic and industrial growth. 50% of Mongolia’s gross domestic product of \$1.5 billion, and 30% of the country’s industrial output, is attributed to economic activities in Ulaanbaatar. The city’s population has grown from 100,000 in 1956 to 1 million in 2007, when the level of urbanisation in Mongolia was 71%, as high as many developed countries. The current population growth rate of Ulaanbaatar is approximately 2.5% per annum, but has previously been much higher. About 80% of recent population growth has been due to in-migration.

Most rural to urban migrants arrive in Ulaanbaatar with very little in terms of money and possessions. Mongolia’s National Statistics Office reported that 35 out of every 100 people in Mongolia live in poverty. In Ulaanbaatar, more than 50% of the population live in poor ger districts (gers are traditional nomadic tent dwellings) on the outskirts of the city. This is where most migrants seek shelter, as they lack the finances to rent or buy in

the formal housing sector. As the built-up area has expanded, the city’s green area has shrunk. The lack of green space is very noticeable when travelling around this city, and it undoubtedly impacts adversely on the quality of life.

Ulaanbaatar is the coldest capital city in the world. The ger districts suffer from a high level of pollution, particularly during the winter, as families living in gers burn coal and other materials to fight the severe temperatures that regularly fall below -30°C. Rising levels of pollution have had a serious impact on the health of the population, particularly with regard to respiratory problems. The incidence of respiratory disease among children under five years of age is two to three times higher in Ulaanbaatar than in rural areas. The relationship between poverty and pollution is clear. Air pollution does not only affect people but it also damages the whole ecological system, in which plants and animals are harmed as well. As the city has expanded, the number of vehicles on its roads has increased considerably, with traffic congestion becoming more frequent and pollution from transport rising significantly.

Sanitation and services are poor in the ger districts. Virtually all aspects of infrastructure are inadequate. Some people have no option but to try to eke out a living from rubbish

Figure 5: The expansion of the ger district onto the hills on the outskirts of Ulaanbaatar



Source: Chris Guinness

dumps by collecting materials that can be recycled. Unemployment in the ger districts is high and is the main factor in the persistence of poverty. Unemployment is particularly high amongst recent migrants.

The population and housing census in 2000 defined one-third of the total population of Ulaanbaatar as migrants. 30% of migrants coming to Ulaanbaatar are school-aged children. As a result of the increase in pupil numbers, some urban schools have had to organise classes in three shifts to cope. School-aged migrant children are three times more likely to be out of school than children of long-term residents. In contrast, many rural schools have seen their rolls drop significantly. Rural schools also suffer from a lack of qualified teachers, many of whom prefer to work in urban areas with access to a much wider range of services.

Figure 6 summarises the main reasons for rural to urban migration to Ulaanbaatar. Most movements are related to seeking employment, better access to markets, improved living conditions, education, and moving closer to relatives. In terms of gender, more men migrate for economic reasons, while women were more motivated by family reasons.

best way to regulate migration in Mongolia, with its huge territory and small population, is to develop regional centres by concentrating on improving infrastructure and social

services. In this way, regional centres would offer a realistic alternative to migration to Ulaanbaatar.

However, there is no doubt that the population of Ulaanbaatar will continue to increase. The city could possibly be expanded by building new housing districts to the east. Measures to control air pollution will also need to be implemented as this is such an important issue in the sustainability of the city.

Two vast mines are currently being developed in the Gobi Desert, exploiting the country's huge deposits of copper, gold and coking coal, which may result in future migration as people seek jobs in the mining industry and in providing services to the new mining communities.

Figure 6: The main reasons for movement to Ulaanbaatar (percentages)

Reasons	A micro study of internal migration			Urban poverty and in-migration survey		
	Male	Female	Total	Male	Female	Total
To start-up a business	3.9	2.8	3.4	3.2	3.5	3.3
To have employment	40.7	28.3	34.5	45.7	37.7	41.4
To improve living conditions	34.2	30.3	32.3	43.5	34.0	38.4
To be close to market	40.7	34.3	37.5	31.2	25.1	27.9
To study	24.8	38.4	31.6	32.5	40.7	36.9
To meet social/intellectual needs	13.8	13.3	13.6	9.1	8.6	8.9
To join relatives	25.3	28.9	27.1	24.3	23.2	23.7
To be close to health services	--	--	--	12.6	12.1	12.4
Children's future	27.9	29.3	28.6	--	--	--
Environmental/ecological	0.8	0.8	0.8	1.6	2.2	1.9
Other	1.3	0.8	1.1	3.4	4.0	3.8
Number of migrants	383	502	885	547	141	688

Source: Dr. Bolormaa Tsogtsaikhan, 'Mongolia', Paper given at PECC-ABAC Conference on 'Demographic Change and International Labor Mobility in the Asia Pacific Region: Implications for Business and Cooperation' in Seoul, March 25-26, 2008

Future trends

Many solutions to the uncontrolled growth of Ulaanbaatar have been put forward, but little has been done in terms of actual planning and investment. It would seem that the

FOCUS QUESTIONS

1. Discuss the significance of environmental change in rural areas as a key factor in rural to urban migration in Mongolia.
2. Describe and explain the impact of in-migration on Ulaanbaatar.