A STRATEGY FOR REDUCING POVERTY IN KAZAKHSTAN

The geography of Kazakhstan
Kazakhstan is by no means the poorest country in Asia. Its Gross National Income (GNI) per capita is estimated by the World Bank at $US1340. This classifies it as a Lower Middle Income Country whose average income is $1240 (World Bank, 2002a). Nevertheless, the government of Kazakhstan itself has recognized poverty as a major social problem in the country. The government has estimated that almost 30 percent of the country’s population live in poverty, that is on per capita incomes of less than 4500 tenge ($30) a month, or $1 a day. Although the extent and depth of poverty in Kazakhstan are not as great as in countries like Ethiopia or Mozambique, which are probably the world’s poorest countries, it is still true that over five million people in Kazakhstan live below the poverty line. This is expressed in terms of lack of income, poor nutrition, poor environment, poor health, etc.

The largest of the former Soviet Republics, Kazakhstan, with its 2.7 million km², is larger than western Europe in area (figure 1). Uralsk in the north-west of the country is closer to Helsinki in Finland than to Almaty in the south-east. Within this great land area, Kazakhstan has very rich mineral and land resources. Three quarters of the country’s Gross Domestic Product (GDP) derives from oil and gas (50 percent) and minerals (25 percent). The country also possesses large reserves of gold, silver, lead, zinc, copper, uranium, coal, iron ore, bauxite and phosphorite ores. Most of these have not yet been fully exploited (Peck, 1999). Its agricultural potential is also huge. It has an average of 2.04 ha of arable land per person-the highest ratio in the world after Australia (World Bank, 2000). Yet, in several areas of northern Kazakhstan, particularly the ‘Virgin Lands’ established under Khrushchev, ratios now exceed 10 ha of arable land per person. This is partly because of depopulation in these areas.

The total population of the country has fallen by almost two million since Independence in 1991, from just under 17 million to just under 15 million. Average population density of
about six per km² is, thus, one of the lowest in Asia. Population has fallen principally because of an outflow of over 2 million ethnic Russians, Germans and Ukrainians who made up the majority of the population until 1997. They occupied many of the important technical positions in industry. Nonetheless there were still 4.5 million Russians, 550,000 Ukrainians and 350,000 Germans in Kazakhstan at the 1999 Census. While Kazakhstan gained about 65,000 persons through natural increase in 1999, it lost 125,000 persons through migration to other countries (KAS, 2000). The government of Kazakhstan is actively encouraging the return of so-called 'Oralmans' or expatriate ethnic Kazakhs who had fled earlier persecution to China, Mongolia and other parts of Central Asia. About 10,000 a year—mainly pastoralists—appear to be returning.

At first sight, Kazakhstan's position would appear to be very favourable. It has secure and well-established boundaries, vast mineral and land resources and a small and relatively well-educated population. However, a comprehensive survey, the Kazakhstan Living Standards Survey (KLSS) undertaken by the National Statistical Agency in 1996 and supported by the World Bank, showed that poverty was a widespread phenomenon in Kazakhstan (Murti, 1996). The survey was undertaken of 1996 households, including 7223 individuals throughout the country. Using a standard 'food basket' technique the survey established a subsistence minimum (SM) of 2871 tenge a month per capita or $40 per capita at market prices. This was the per capita income required to obtain subsistence minimum in Kazakhstan. In Kazakhstan the SM line is calculated on the basis of the cost of a basket of goods that includes both food (70 percent) and non-food items (goods and services, 30 percent). The food basket is calculated on the basis of prescribed physiological needs of human beings for basic food (bread, milk, oil, meat, vegetables and sugar). The non-food basket includes both the cost of goods, such as clothes and shoes, as well as utilities and other services that can be very costly. The SM is also differentiated by region according to regional food prices. There appear to be some deficiencies with the SM, including the arbitrary value of the non-food component and its insensitivity to variations in non-food prices and utilities.

The 1996 survey showed that 34.5 percent of the national population lived below the SM and could be classified as living in poverty. There were large regional differences because, in southern Kazakhstan, 69 percent of the population was estimated to be living in poverty, whilst only 9 percent in northern Kazakhstan were classified as 'poor'. Poverty was associated primarily with large families with many children and with the unemployed. Ill health and a lack of education were also said to be features of poor people. Strangely, old aged pensioners and women were not particularly heavily represented amongst the poor.

**Development since Independence**

The survey mentioned above estimated that, in 1989, before Independence, whilst Kazakhstan was still a constituent republic of the Soviet Union, the maximum proportion of the population living below the SM was 15 percent. This was confirmed by another independent study in 1992 which asserted that about 15.5 percent of the 1989 Kazakhstan population lived below the then poverty line (Atkinson and Mickleright, 1992). It, therefore, appeared that, despite the fact that Kazakhstan had great material resources, poverty had more than doubled in the first five years of independence from 1991 to 1996. Why was this? For those who did not experience it, the trauma of the transition from a Soviet command economy to a Western market economy at the beginning of the 1990s is difficult to comprehend. In Kazakhstan most of the major industries were privatized between 1993 and 1996, often with calamitous results for employment and social conditions. Major public utilities, such as water pipelines, reservoirs, roads and transport
systems, ceased to be regularly maintained. Indeed, all over rural Kazakhstan today one finds clear physical evidence of the collapse of the Soviet system. Many remote rural towns were served by pipelines bringing water long distances from well-fields up to 150 km away. During the Soviet period, energy to pump water long distances cost such communities virtually nothing. These communities and their infrastructure were often maintained by large State-owned companies. These pipelines have now fallen into disrepair and leak badly. It is not clear who is responsible for maintenance. Nor are there funds for pumping the water, nor for chemical treatment. The results are frightening. Large communities have intermittent supplies of fresh water and often have to use untreated water because of lack of treatment. This is a common feature in drier areas of southern Kazakhstan. Collective farms also came to a standstill, and with that came the collapse of an entire network of social facilities, such as health centres, schools, kindergartens and retail shops. The cause of these events was often the sudden disruption - after 1991 - of trade between Kazakhstan and other Soviet republics, whereby Kazakhstan lost markets and also sources of raw materials overnight. Industrial and agricultural output is estimated to have fallen by at least 40 percent from 1991 to 1996, wages fell in real terms by 50 percent and unemployment rates reached 15 percent from less than 1 percent in 1991. Millions of people were thrown out of work or lost their pensions. Widespread poverty afflicted all the former Soviet republics, including Kazakhstan.

After 1996, Kazakhstan continued to experience serious macro-economic problems and these were exacerbated by the major economic crisis in Russia in 1998 - because of Kazakhstan's close linkages with the Russian economy: GDP actually fell in Kazakhstan in 1998. Poverty continued to increase until then. However, since 1998 there has been a marked improvement in the country's macro-economic performance. In 1999 the GDP grew by 1.9 percent and in 2000 and 2001 it grew by over 10 percent. The forecast for 2002 is 7-8 percent (EBRD, 2002). This is largely attributable to the fact that oil and gas production in the west of Kazakhstan has begun to come on stream and that the price of Kazakhstan raw material resources has been consistently high since 2000. However, this brings with it other problems, and the principal one is that of the 'Dutch disease'. This refers to highly uneven growth in resource-rich economies where the oil and gas sectors prosper and the rest of the economy is depressed. It derives from the Netherlands' experience in the 1970s and 1980s, where the gas sector was extremely buoyant but the rest of the economy did not grow. This creates great social discrepancies between a small, but highly prosperous, oil-based élite and a large, and often impoverished, proletariat. There are clear signs of this developing now in Kazakhstan. There is evidence that poverty is actually most intense in the two regions of greatest oil production, i.e. Atyrau and Mangistau, which adjoin the Caspian Sea. This is because these areas have been the centres of a traditional nomadic, subsistence pastoralism into which a highly money-orientated economy has suddenly been injected. It has been impossible to incorporate a traditional nomadic society into a modern oil-based sector. The physical and social contrasts can be very striking.

Kazakhstan is thus in a particularly difficult position as regards poverty reduction. The country now has one of the highest economic growth rates in the world, which is a result of increasing production of oil and gas in the west of the country and continued high prices for oil and metal commodities. Oil revenues already amount to $5 billion a year or $300 for every man, woman and child in the country. By the year 2015 this could be multiplied by five times to $25 billion as the new north Caspian fields are developed (Anon., 2000). Politically, poverty on a widespread scale - which is a plainly visible - cannot be permitted to co-exist with such new wealth.
Kazakhstan's Poverty Reduction Strategy

The government of Kazakhstan saw the inherent dangers of a new oil-based economy co-existing with widespread poverty induced by the collapse of Soviet industry and institutions after 1991. It, therefore, decided at a relatively early stage to initiate what it called a 'National Poverty Reduction Strategy'. Support in developing such a strategy was immediately forthcoming from the Asian Development Bank (ADB) and the United Nations Development Programme (UNDP). It is clear that Kazakhstan with its great resources and small population is an interesting investment object for development banks like the World Bank, the European Bank for Reconstruction and Development (EBRD) and the ADB, so that it is not difficult to attract external assistance to Kazakhstan. However, the ADB, in particular, was anxious to secure the interests of the poor in any development programme. It could not afford to support development of the modern economy of the country while ignoring the welfare of the majority of the population. In the year 2000, the ADB, therefore, started to assist the government in preparing a 'Comprehensive Medium Term Poverty Reduction Strategy'. The EBRD concentrated its efforts on promoting small and medium enterprises and micro-credit systems which have proved to be very important in poverty reduction, whilst the World Bank concentrated on providing technical assistance for poverty reduction studies. It is interesting to note that the World Bank has not engaged actively in poverty reduction strategies in Kazakhstan. This is, perhaps, because it has concentrated its efforts on poorer countries and, in particular, the 42 so-called Highly Indebted Poor Countries (HIPC) (World Bank, 2002(b)). In these countries the production of a 'Poverty Reduction Strategy Policy' (PRSP) is a requirement for continuing development assistance. This is not a requirement in Kazakhstan.

In June 2000, the government published a first 'Program of Poverty Alleviation and Unemployment Control 2000--2002'. Its primary aim was to reduce the unemployment rate from 13.5 percent to 9 percent over a period of two years and to improve the provision of pensions. At this point, poverty was directly linked with unemployment and the multi-dimensional aspects of poverty were not sufficiently recognized. The preparation of this program was supported by the UNDP, which at the same time produced its Human Development Report for Kazakhstan 2000: Fighting Poverty for a Better Future (UNDP, 2001). This examined in detail the causes of poverty in Kazakhstan and its regional distribution. It is interesting to note that this document pointed out that the transition between 1989 and 1999 in the former Soviet Republics and, in particular, in Central Asia, had been the greatest reversal of fortunes in any region in the world. It pointed, in particular, to the significance of regional differences in poverty in Kazakhstan.

In April 2001, the government started to prepare the 'Comprehensive Medium-Term Poverty Reduction Strategy for Kazakhstan, 2003-2007', with assistance from the ADB and the UNDP. The Strategy, prepared by the Ministry of Economy and Trade in conjunction with the Ministry of Labour and Social Protection, was completed in May 2002 and is now being implemented.

The work in preparing the Strategy was divided into various sections: a comprehensive poverty assessment; special studies of different aspects - the private sector, micro-finance and social protection; regional studies of poverty in the Karaganda and Jambyl regions; a special study of 'Company Towns' and the preparation of the Strategy itself.

The Poverty Assessment

A Poverty Assessment was first carded out and was based on a Domestic Household Survey (DHS) which was conducted in 2001 by the National Agency for Statistics under the aegis of the World Bank. Some 12,000 households and 44,248 individuals were
interviewed four times quarterly during 2001, together with one baseline interview at the beginning of the survey; the survey included 42 percent rural and 58 percent urban households. This superseded the KLSS in 1996 discussed earlier.

The Poverty Assessment defined the SM as before, but also proposed a new concept, the 'poverty line' (PL). This was defined as 38 percent of the SM, and was the level of income which entitled people to social assistance from the Ministry of Labour and Social Protection responsible for all benefits and pensions in Kazakhstan. Table 1 illustrates the results from the DHS for the SM and the PL. The survey shows that the proportion of the population living below the SM has been reducing in recent years and that it fell from 39 percent in 1999 to 31 percent in 2001. This is in response, of course, to the favourable macro-economic circumstances since 1998.

The Poverty Assessment shows very large regional variations in the distribution of poverty in Kazakhstan. As few as 7 percent of the population of Astana City are below the SM, but the proportion is as high as 87 percent in the rural areas of Mangistau oblast (region). This suggests particular areas where poverty reduction efforts should be focused. The 2001 DHS data presented in table 2 show the prevalence of poverty as generally greater in the southern and western oblasts of Kazakhstan, and in the areas where there is a predominance of Kazakh speakers. In all of the oblasts, rural areas are poorer than urban areas. Thus, the Poverty Assessment shows that people in the southern and western oblasts, people in rural areas, are among the poorer members of the population.

The Poverty Assessment makes very clear the multi-dimensional nature of poverty in Kazakhstan. It is not merely the lack of a job, an income or a pension. It is much more complex than that. It can be lack of a clean environment-something of particular relevance in a country like Kazakhstan, which has been subjected to a great deal of highly polluting mineral extractive industry. It can be lack of clean drinking water. It can be lack of education, although with literacy rates of over 95 percent this may not be so relevant for Kazakhstan. It can also be lack of health. The DHS tries to correlate health indicators with poverty (table 3).

It is clear from table 3 that the oblasts with the greatest incidence of poverty (percentage below the SM)-i.e. Kyzyl Orda, Atyrau and Mangistau - have the highest rates of incidence of cancer, tuberculosis and other infections. The incidence of tuberculosis-which a clear indicator of poverty - is four times higher in Kyzyl Orda Oblast, in southern Kazakhstan, than it is in Almaty City. Much of this can be put down to malnutrition and poor shelter.

The Poverty Assessment found that three main factors played a significant role in the extent of poverty: household size, level of educational attainment and geographical location. Large families with children tend towards poverty. In Kazakhstan, it is estimated that an additional child in the household increases the probability of being poor by 8-10 percent. Children-who cannot work-have a larger effect on poverty than elderly or working age adults who are able to contribute pensions or wages to the household income. The Poverty Assessment also found that poverty is lowest when the household head has a university degree. Non-university post-secondary education lowers poverty in Kazakhstan, but the effect is much smaller than that of a college, education on poverty. As tables 2 and 3 indicate, the region in which a household lives is a more significant correlate of deprivation than the rural/urban status. Poverty is highest in the ethnically Kazakh southern region and lowest in Almaty and the ethnically Russian northern part of Kazakhstan.
Poverty in company towns
A comprehensive survey of 59 of Kazakhstan's company towns was undertaken in the preparation of the Poverty Reduction Strategy. The 'company town' is, perhaps, a particularly Soviet concept. It means a new town founded to support one or a small number of related industries. It is known as mongorod-'one-industry town' in Russian. In Kazakhstan there are about 70 or so of these towns dispersed throughout the country, most having been established in Soviet times between 1930 and 1970. Some, like Stepnogorsk, north-east of the new capital, Astana, were 'closed' - they did not exist officially, they were not marked on maps, access was difficult and no statistics were available on them. Stepnogorsk was 'closed' because it possessed a major strategic uranium processing plant. Most of the 'company towns' were settled largely by technicians and experts from other parts of the Soviet Union - Russians, Ukrainians and Belorussians.

These company towns were a geographical anomaly, as their location and establishment were contingent on the existence and operation of the Soviet system of trade between republics. It was usual for one Soviet republic, like Kazakhstan, to produce, for example, a mineral resource and to export it to other Soviet republics, such as Belarus. At the same time it was usual to import other goods, such as textiles from Estonia to Kazakhstan. Trading was often facilitated by bartering. With the dissolution of the Soviet Union in 1991, this system of trade collapsed totally. Customs barriers went up and it became impossible to export or import raw materials for industry or final goods. The survey found that almost all company towns in Kazakhstan had suffered major economic decline. Output had fallen in most by at least 50 percent and unemployment levels were 30-40 percent. Long-term unemployment - several years - was common. Many of the productive industries had been controlled from a central management in Moscow. When this disappeared, factories fell into disuse and productive assets, such as copper and other metals, were pillaged by residents. A striking feature of most company towns in Kazakhstan today is abandoned apartments and dachas - rural villas. These have simply been abandoned by their owners who have returned to Russia or Germany, and their property has been pillaged for building materials. Poverty was naturally very widespread. Industries could no longer provide adequate social services to their employees, and those who were unemployed were no longer eligible for social services. At the same time, local government, which had never been responsible for services before, was unable to cope with new demands.

The survey of the company towns included a number of personal interviews in about 40 towns. Interviews in the town of Derzhavinsk in Kostanai Oblast, close to the Kazakhstan border with Russia are typical. Over 35 percent of employment in the town came from the Soviet military which pulled out after independence, so the rate of unemployment soared to over 40 percent. Adequate water supplies are also now in short supply. Important buildings were falling into disrepair because of lack of maintenance or pillaging. Drug and alcohol abuse, particularly amongst men, is now a major social problem and crime is also on the increase. Temirtau, an iron-and steel-producing city north of Karaganda, has one of the highest rates of intravenous drug addiction in the world (Anon., 1998). This is a result of economic deprivation and industrial collapse. The preoccupations expressed in this survey are quite similar to those presented in Voices of the Poor: From Many Lands, which is a World Bank-financed survey of no less than 60,000 people in many countries (Deepa and Patti, 2002). This is particularly true of those interviewed in the Russian Federation. There they have two major complaints very similar to those in Kazakhstan. In the first place, the whole structure of society has collapsed since Independence with the demise of industrial employment. In the second place, social services were usually provided before Independence by employers and institutions. This is no longer so and the new local
authorities who have assumed responsibilities for. delivery of social services cannot cope with the demand.

There were, of course, many success stories too. These were particularly associated with the development of small- and medium-scale enterprises (SMEs) and with micro-finance schemes. Kazakhstan has made a major effort to stimulate the development of small private businesses. These include small-scale industrial production for the local consumer market, food production, beer, soft drinks, bakeries and service trades like hairdressers. Development of micro-finance-developing effective credit systems for small businesses has been seen as a key to poverty reduction and to the creation of employment in Kazakhstan. The EBRD (2001) has had a very successful programme of lending to small businesses in Kazakhstan.

Reducing poverty in the regions: Karaganda and Jambyl Oblasts
It is often necessary to develop local, regional strategies to combat poverty. For this reason it was decided to test pilot regional poverty reduction strategies in two regions of Kazakhstan, that is Karaganda and Jambyl. The author of this paper was responsible for these and carded out the work at the beginning of 2002.

Karaganda Oblast is the largest of Kazakhstan's regions. It is 428,000 km² - slightly larger than Sweden - over 1000 km from west to east and 400 km from north to south. Large tracts of the oblast are trackless steppe or semi-desert, and 82 percent of the oblast population is classified as 'urban'. Much of the oblast is uninhabited and settlement is concentrated in major urban settlements at Karaganda, Balkhash, Temirtau and Jezkazgan. All of these cities are founded on mining and mineral processing. Karaganda City, the capital, has a population of 500,000. The majority of Karaganda's population are non-Kazakh origin - Russian, Belorussian, Ukrainian and German - because of their employment as specialists in mining and industry. However, the share of Kazakhs is now increasing, as many non-Kazakhs have emigrated during the past decade.

In the third quarter of 2001 the share of population in Karaganda Oblast with incomes below the subsistence minimum was 24.4 percent - compared with 26.4 percent for Kazakhstan as a whole. Average household size was relatively small - 3.0 - reflecting the predominance of non-Kazakh in the population. In Karaganda Oblast poverty is a feature of the six company towns in the oblast. These towns have been badly affected by the collapse of large-scale mining and metal extraction industries, environmental problems associated with the Baikonur rocket testing range and the Semipalatinsk nuclear testing range, poor water supplies and large numbers of abandoned houses due to migration from the oblast. The fact that Karaganda was a centre for prisons and penitentiaries in Soviet times has also had an impact on poverty in the region and is a factor in the prevalence of drugs, alcohol and other social problems associated with poverty.

The poverty reduction programme for Karaganda Oblast proposes a series of goals, tasks and priorities for action, including encouraging large and medium-scale enterprises, substituting foreign workers and specialists with local people, promoting small business development and agriculture, etc. The programme then proposes a series of concrete measures aimed at reducing poverty in the oblast. These include reviving the extractive industry and processing industry and establishing a special agency in the oblast for attracting inward investment from overseas. Development of small businesses will be encouraged by setting up a business incubator network similar to others already established in Kazakhstan. A Professional Education Fund is to be established in order to
assist in the production of professionally educated human resources for the specific needs of the oblast.

Jambyl Oblast is situated in southern Kazakhstan adjacent to Kyrgyzstan. It measures 144,000 km² and has a population of 985,000. This gives a density of seven per km² just above the national average for Kazakhstan. The northern two-thirds of the oblast are largely semi-desert, with rainfall under 300 mm annually, rendering it virtually desert.

In the third quarter of 2001 the share of the population in Jambyl Oblast with incomes below the subsistence minimum was 41.5 percent, compared with 26.4 percent for Kazakhstan as a whole. Jambyl is, therefore, considerably poorer than the national average and rural people are much poorer than urban ones - 46.2 percent versus 34.7 percent. Incidence of poverty is closely related to size of households and almost 78 percent of the poor live in households with five or more persons. Migration is an important factor in poverty here. There is considerable migration out of rural areas to the oblast capital Taraz and to other parts of the country. There has also been extensive migration by Russians and Germans back to Russia and Germany. On the other hand, there has been extensive migration to Jambyl Oblast from poorer areas in Central Asia e.g. Tajikistan and Uzbekistan. The main vulnerable groups in Jambyl are the unemployed, rural people, migrants/oralmans, children and youths, large families, disabled persons, ex-prisoners and homeless people.

The poverty reduction programme for Jambyl Oblast proposes a series of goals, tasks and priorities for action, including increasing the effectiveness of targeted social assistance, developing agricultural production, increasing employment in large and medium-scale industry and agriculture, etc. The programme then sets out a series of concrete measures on improving targeted social assistance, improving social infrastructure, improving roads, increasing employment in major industry. It also means developing agriculture, extending micro-credit facilities, providing training and retraining, involving civil society in poverty problems and increasing local governance.

**The strategy**

In April 2002 a State Programme for Poverty Reduction 2003-2005 was approved by the government of Kazakhstan (Ministry of Economy and Trade, 2002). Full details of this programme (in English, Russian and Kazakh) can be found on the Internet at: http://www.antipoverty.nursat.kz. The Programme aims at reducing the proportion of the population living below the SM by about one-third from 27 percent to 18 percent, reducing unemployment from 9.4 percent to 8.1 percent and increasing GDP per capita from $1520 to $1950. The main elements of the Programme are small business development, micro-finance, education, health, soil, water and employment creation. The Programme is expected to cost about 7182 million tenge or $48 million. It will be implemented by Central Government in association with the 18 regional oblast governments.

**Some conclusions**

In many ways Kazakhstan enters the 21st century as one of the best endowed countries in Asia. It has a tiny population in relation to its land resources, agricultural potential and mineral and oil and gas wealth. However, the environmental legacy of 70 years of Soviet rule has not been benign: many parts of the country were badly polluted or despoiled. The Aral Sea was allowed to dry up in order to provide irrigation for Uzbekistan and Turkmenistan. Parts of Lake Balkhash were badly polluted by wastes from copper processing. The Baikonur Cosmodrome area not far from the Aral Sea was contaminated...
with radiation from Soviet rocket-launching activities. The area around Semipalatinsk in eastern Kazakhstan is still suffering from the effects of 40 years of nuclear testing.

The transition from Soviet rule to a market-based economy has been responsible for dissipating much of the great promise which Kazakhstan ought to display. Millions of people have either emigrated or lost their jobs as economic output plunged and is still struggling to recover 11 years on. Thus, almost one-third of its population are living from hand to mouth.

Fortunately, Kazakhstan would appear to have the financial resources, or at least potential - from its oil and gas production, to address its basic poverty problems. It has developed a strategy to address the multi-dimensional nature of poverty - environmental, economic and social issues.

What has emerged as one of the most difficult issues in tackling poverty in Kazakhstan - and probably other former Soviet republics - has been the problem of governance. With the collapse of the economy and institutions since Independence in 1991, local governments have found it extremely difficult to assume new responsibilities for social services like health, education and pensions. In the Soviet Union these were frequently the responsibility of the managers of institutions such as the collective farms. Now they are the responsibilities of the government and unless it is in a position to shoulder these new burdens, poverty will continue to remain a very visible problem in Kazakhstan.

**Table 1: Monthly subsistence minimum and poverty line amounts**

<table>
<thead>
<tr>
<th>Year</th>
<th>Subsistence minimum (tenge)</th>
<th>Subsistence minimum ($ US)</th>
<th>Poverty line (tenge)</th>
<th>Poverty line ($ US)</th>
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</thead>
<tbody>
<tr>
<td>1999</td>
<td>3394</td>
<td>28.3</td>
<td>n/a</td>
<td>n/a</td>
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<td>2000</td>
<td>4007</td>
<td>28.2</td>
<td>1523</td>
<td>10.7</td>
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<tr>
<td>2001</td>
<td>4686</td>
<td>31.9</td>
<td>1781</td>
<td>12.1</td>
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</tbody>
</table>

**Table 2: Share of population (percent) below subsistence minimum by oblast and rural and urban location, 2001**

<table>
<thead>
<tr>
<th>Oblast</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akmola</td>
<td>31</td>
<td>27</td>
<td>29.4</td>
</tr>
<tr>
<td>Aktyube</td>
<td>39</td>
<td>20</td>
<td>27.6</td>
</tr>
<tr>
<td>Almaty</td>
<td>45</td>
<td>42</td>
<td>44.2</td>
</tr>
<tr>
<td>Atyrau</td>
<td>53</td>
<td>35</td>
<td>41.5</td>
</tr>
<tr>
<td>East Kazakhstan</td>
<td>36</td>
<td>23</td>
<td>28.8</td>
</tr>
<tr>
<td>Jambyl</td>
<td>54</td>
<td>41</td>
<td>48.5</td>
</tr>
</tbody>
</table>
West Kazakhstan  40  19  31.4  
Karaganda        30  24  24.9  
Kyzyl Orda       65  42  51.1  
Kostanai         36  17  26.0  
Mangistau        87  44  52.1  
Pavlodar          24  17  19.7  
North Kazakhstan 20   8  15.0  
South Kazakhstan  36  24  31.7  
Astana City      n/a  7   7.3  
Almaty City      n/a 12  12.3  
Kazakhstan        39  24  30.9  


Table 3: Health indicators (rates per 100,000) and percentage below subsistence minimum (SM) level by oblast

Legend for Chart:
A - Oblast
B - Infant mortality
C - Maternal mortality
D - Tuberculosis incidence
E - Cancer incidence
F - Infections and parasitic diseases
G - Percentage below SM

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
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<tbody>
<tr>
<td>Akmola</td>
<td>16.5</td>
<td>68.4</td>
<td>169.6</td>
<td>229.1</td>
<td>2338</td>
<td>29.4</td>
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<td>Aktube</td>
<td>34.1</td>
<td>61.3</td>
<td>231.6</td>
<td>156.1</td>
<td>2152.1</td>
<td>27.6</td>
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<td>Almaty</td>
<td>13.7</td>
<td>50.1</td>
<td>118.4</td>
<td>142.5</td>
<td>1390.2</td>
<td>44.2</td>
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<tr>
<td>Atyrau</td>
<td>18.5</td>
<td>108.6</td>
<td>177.1</td>
<td>148.5</td>
<td>3781.6</td>
<td>41.5</td>
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<td>East Kaz</td>
<td>19.8</td>
<td>71</td>
<td>124.2</td>
<td>265.5</td>
<td>2719.4</td>
<td>28.8</td>
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<tr>
<td>Jambyl</td>
<td>24.3</td>
<td>60.6</td>
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<td>132.9</td>
<td>1537.1</td>
<td>48.5</td>
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<td>Karaganda</td>
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<td>43.9</td>
<td>144.7</td>
<td>225.4</td>
<td>1862.5</td>
<td>24.9</td>
<td></td>
</tr>
<tr>
<td>Kostanai</td>
<td>22.1</td>
<td>92.9</td>
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MAP: Fugure 1. Map of Kazakhstan

REFERENCES


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By Michael Fergus

Michael Fergus, a geographer and regional planner based in Norway, has worked as a consultant for the United Nations, the World Bank and the Asian Development Bank over the past 25 years. He has worked extensively in Kazakhstan since 1997 and contributed an article on the Aral Sea Environmental Crisis to Asian Affairs, XXX, February 1999. On 22 May 2002 he gave a lecture to the Society on 'Old and New Kazakhstan: Recreating a National Identity'. The article below is based on his recent work for the Asian Development Bank, preparing a national poverty reduction strategy for Kazakhstan.

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