



Siberian Federal District.

Building Wealth

The Siberian Federal District (SFD) has 30% of Russia's land mass and comprises the whole of Eastern Siberia and most of Western Siberia (except for Tyumen Region and its autonomous districts). However, population of the SFD is only 20 million, or 14% of the Russian total. There are 16 subjects of the Russian Federation in the SFD, including 4 autonomous districts. Planned unification of autonomous regions with their "parent" territories will reduce the number of subjects of the federation in the SFD to 12.

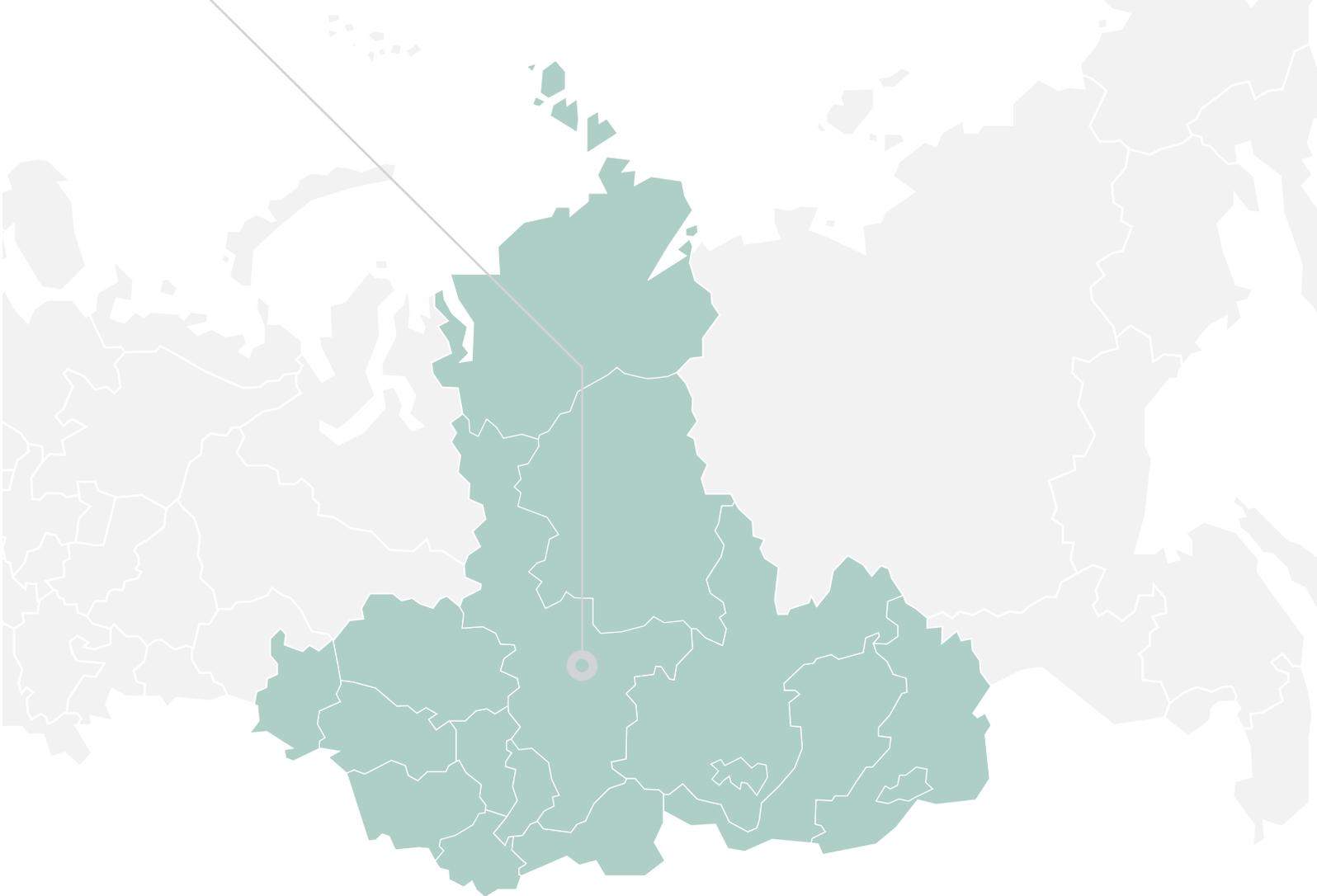
Russians refer to Siberia as the country's "treasure house" due to its wealth of natural resources. However, the most important of these resources – oil & gas reserves – are now in the Urals Federal District, which includes Tyumen Region, and the whole of the Siberian Federal District has a smaller share in the Russian economy than Tyumen Region alone (with its autonomous districts). Tyumen represents more than 13% of total Russian GRP compared with 12% for the Siberian Federal District (less than the District's share in total Russian population).

Among SFD regions only Krasnoyarsk Territory, Tomsk Region and Kemerovo Region have per capita GRP, which is higher than or close to average Russian GRP. Economic leadership of these three regions in the SFD is assured by orientation of their economies to export of raw materials (oil & gas and metals). Irkutsk Region used to be a fourth leader, but its growth rates have been slow and its development gap compared with the top-3 has steadily

widened (more information on human development in Irkutsk region in the MDG context can be found in Box 6.1). The middle group in the SFD, measured by economic growth rates, consists of Omsk and Novosibirsk Regions, which fare relatively well thanks to strong urban centers (each with over one million inhabitants) and highly-developed manufacturing and service sectors. The Republic of Khakassia is also in the middle group, thanks to benefits of non-ferrous metal exports.

Less economically developed regions include the predominantly agrarian and heavily subsidized Altai Territory as well as the Republic of Buryatia and Chita Region, both located to the east of Lake Baikal and both suffering from depressed economies and chronic under-investment. The situation in the Altai Republic is even less favourable (see Box 6.2) and the worst off in the SFD are the Buryat Autonomous Districts, which have almost no viable industry and subsist entirely on federal subsidies. The situation in the Agin-Buryat Autonomous District has improved in recent years thanks to transfer by some large businesses of their legal addresses (and part of their tax payment) to Agin-Buryat, but this is hardly a basis for sustainable growth.

Our division of SFD regions into groups is highly relative, as it is hard to single out significant distinctions, but it does suggest that half of regions in the Siberian Federal District continue to lag far behind other regions of Russia in terms of economic development. Economic problems



are reflected in indicators relating to living standards and social development.

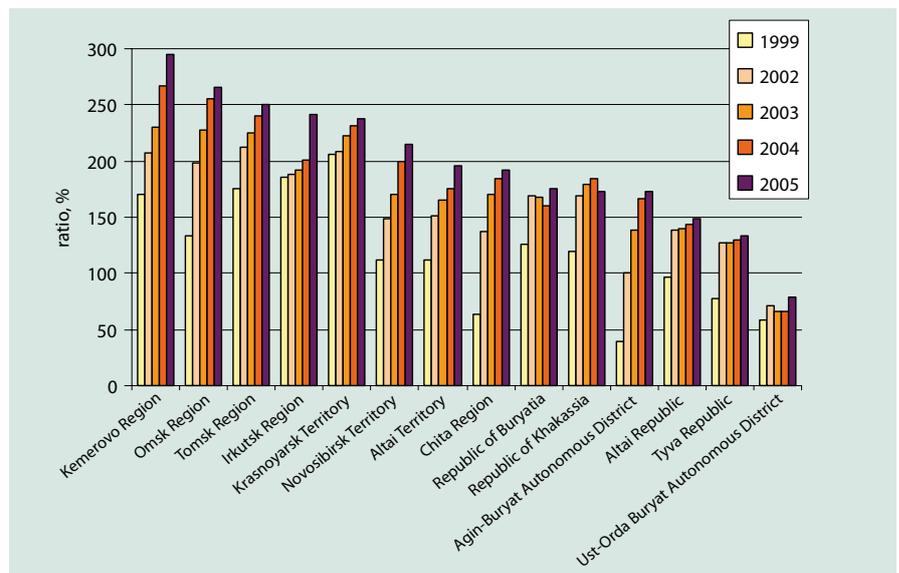
There are major differences between income levels of the population in Siberia: the ratio of per capita income levels to the subsistence minimum in more developed regions is 2-3 times higher than in outsider regions (Figure 6.1). Even very substantial support from the federal centre will not be able to reduce dramatic development lags in the Ust-Orda Autonomous District and Tyva Republic. Income levels in more developed regions are not only higher but also usually rise faster than in less developed regions. Polarisation of regional development is more pronounced in Siberia than in European Russia. Barriers, which underdeveloped regions find hard to surmount, include lack of infrastructure and rises in the cost of living.

Purchasing power in on the rise in regions whose economy depends predominantly on export of oil, gas or other raw materials, but also in the southern part of Western Siberia, in Omsk and Novosibirsk regions, where the climate is less harsh, cost of living is lower, and there is better developed infrastructure

and a number of metropolises. Personal money incomes in these regions are significantly lower than in the exporting regions, but there is also less purchasing power inequality.

Income inequality (the ratio of the 20% of the population with highest incomes to the 20% with lowest incomes) in the Siberian Federal District does not depend

Figure 6.1. Ratio of average per capita cash incomes to the subsistence wage, % (annual average)





Chapter 6. Siberian Federal District. Building Wealth

so much on levels of economic development as it does in other federal districts, where wealthier regions are more unequal. The quintile ratios in comparatively developed exporting regions of the SFD is 7–8, which is not a great deal higher than ratios of 5–7, found in underdeveloped regions of the District. Income inequality in exporting regions of the Siberian Federal District is relatively low because they mostly specialize in metallurgy and timber, where wages are not as high as in the oil industry, so the gap between various income groups inside each exporting region remains moderate. The fact that income inequality in less developed Siberian regions is almost as high as in the exporting regions has another explanation: although agricultural workers in the less developed regions earn little, these regions also have a sizeable class of people employed in governance, who earn 1.5–2 times more than the SFD average. There is a third reason for relatively high levels of inequality in Omsk and Novosibirsk Regions, which are both centered on cities with over a million inhabitants: wages in the service sector and at some industrial enterprises have been growing quickly compared with wages in the stagnating rural economy. The quintile ratio in these regions has risen more rapidly than anywhere else in the SFD, from 5 to 8 times over 5 years, although the income gap has increased to some extent in all SFD regions. Generally, income inequality in Siberia is increasing, both between regions and between income groups in the same region.

Economic growth has helped to reduce income deficit (the ratio of extra income, which would be needed to raise the poor to the poverty line, to total incomes of people in a region) (Figure 6.2). However, about a third of Siberian regions are still marked by considerable income deficits (8–55%), unlike regions in Central Russia. Measured in this way the situation in Siberia looks even worse than in the troubled Southern

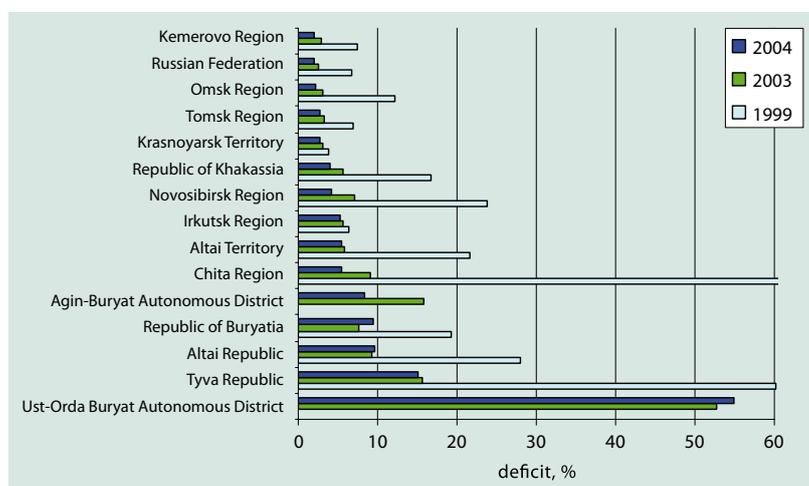
Federal District, where less than a quarter of regions continue to have significant income deficits. Part of the explanation is that rates of economic growth in Siberian regions, including relatively developed regions, remain slower than in European Russia, so that income growth is also slower. Also, less developed regions in Siberia do not receive the same degree of support from the federal government as underdeveloped regions in the Southern Federal District. Reducing the income deficit in less developed regions requires a federal effort to raise public sector pay levels and social payments. In this respect the Southern Federal District seems at present to have higher priority for the federal government than Siberia.

There are no data on extreme poverty as such, but the problem can be assessed to some extent using general poverty indicators (Figure 6.3). Only three Siberian regions have lower shares of people below the poverty line than Russia as a whole: these are the relatively developed Tomsk and Kemerovo Regions and Omsk Region, which benefits from a low cost of living. Shares of people below the poverty line in these three regions are 13–17%. However, the poverty rate in 2005 in about a third of SFD regions still exceeded 30% and the rate in Ust-Orda Autonomous District was the highest in the country at 80%. Such a high indicator must include a large measure of extreme poverty.

MDG indicators fail to confirm the myth that people in Siberia enjoy excellent health. Health problems of mothers and children appear to be more acute in Siberia than in European Russia. Infant mortality rates in most Siberian regions are higher than the Russian average and in the Republic of Tyva they are twice higher than the average (Figure 6.4). In almost all of the republics and autonomous districts child mortality rates for children under 5 are 40–80% higher than the Russian average, due to grossly underdeveloped health care systems and low living standards of indigenous peoples. There have been gradual improvements in all Siberian regions, but reduction of infant mortality rates will require a considerable effort to develop the system of health care and to improve living conditions and living standards.

Social diseases are another extremely serious concern in Siberia. High rates of tuberculosis are part of the region's legacy from the past – Siberia has always had a reputation as "the land of exile" and still hosts a large number of penitentiary institutions, with high rates of tuberculosis. Problems, which contribute to the spread of tuberculosis, are unfavourable climate and low availability of medical services due to a thinly spread population and considerable poverty. Rates of incidence and mortality from tuberculosis are significantly higher in Siberia than in Russia as a whole (by more than 3 times

Figure 6.2. Ratio of income deficit of the poor to total personal income, %



in Tyva) and are still growing in the majority of Siberian regions, in contrast with declining incidence elsewhere in the country (Figure 6.5). Even relatively developed regions of Siberia have had little success in reversing the trend. Tomsk is an exception to this (for more information on human development and achievement of MDGs in Tomsk Region, see Box 6.3 below)

HIV/AIDS, which has taken root in regions with export-oriented economies and relatively high personal incomes, is a new problem for Siberia. Irkutsk is the worst region in Russia by levels of HIV-infection. Its total rate for the period 1987–2006 was more than 3 times higher than the Russian average and has reached 778 infected persons per 100,000 population (0.8% of all those in the region). Kemerovo Region rose above the average rate for Russia in 2005 and the rate of HIV infection in Krasnoyarsk Territory approached the average in 2006. In Tomsk the epidemic has so far been localized in the oil town of Strezhev.

The problem of HIV/AIDS is at least as challenging as that of tuberculosis. Social infrastructure and healthy lifestyles do not take easily in Siberian towns and cities, which tend to be located alongside metallurgy plants, pulp and paper mills, oilfields and mines. Young people in such industrial settlements are in danger of falling victim to drug addiction due to lack of opportunities for personal development and leisure. Rapid spread of HIV/AIDS in Siberia underlines the need for serious efforts by government, in coordination with NGOs and families, to counter drug addiction, which is the main channel for spread of the infection.

The most urgent gender-related problem in Siberia is extremely low life expectancy for men. Male mortality indicators in Siberia are alarming, even by Russian standards (the national average life expectancy for men is very low at 59 years). Half of Siberian regions are below the national average. In the Republic of Tyva life expectancy for men recently fluctuated between 48 and 51 years (46–50 in rural areas), in Taimyr Autonomous District it was about 50 years, in Ust-Orda Autonomous District and in Irkutsk Region the range is 52–53 years. Low life expectancy for men is also characteristic for the Republics of Khakassia and Altai as well as Krasnoyarsk Territory (51–54 years). In Chita Region life expectancy for men in urban settlements is even lower than in rural areas – 52 and 54 years respectively.

Appalling male mortality rates in Siberia are due to mass alcoholism and low quality of life, particularly in rural areas and settlements

attached to depressed industrial plants. Life expectancy has shown almost no change for the better, and the high

Figure 6.3. Level of poverty in regions of the Siberian Federal District

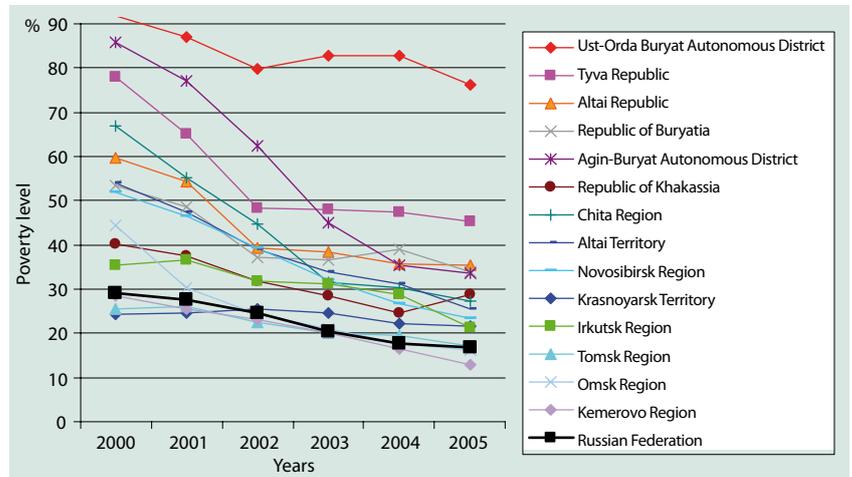


Figure 6.4. Infant mortality in regions of the Siberian Federal District

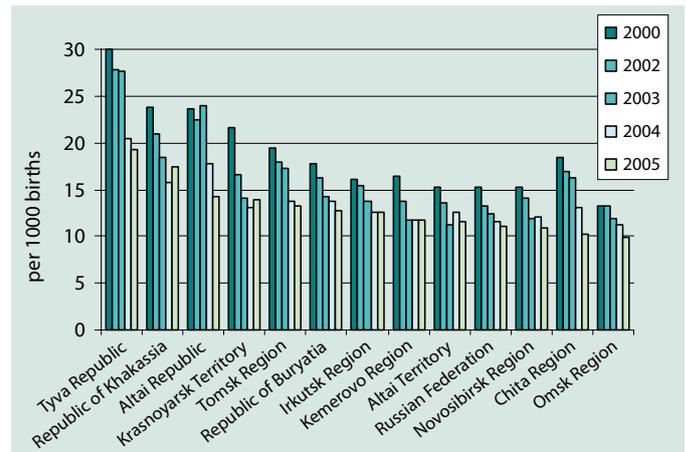
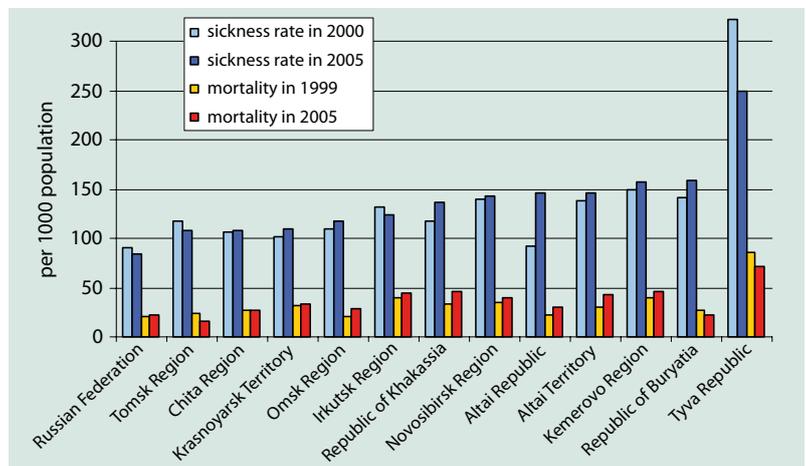


Figure 6.5. Tuberculosis-related sickness and death rates in regions of the Siberian Federal District





Chapter 6. Siberian Federal District. Building Wealth

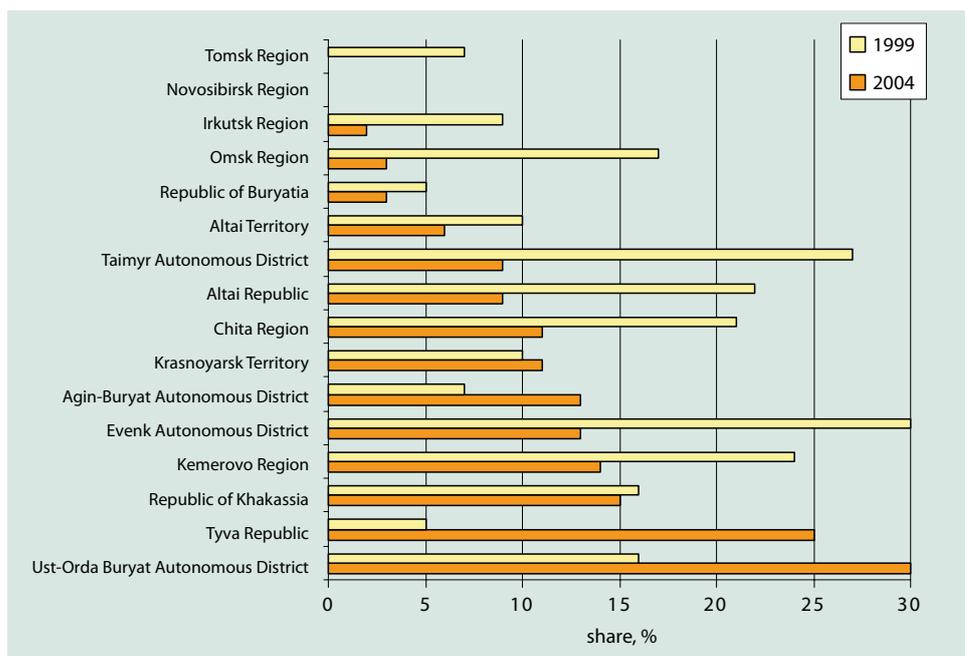
male mortality rate exacerbates ongoing natural decline of population, adding to the effect of migration processes and leading to rapid depopulation of Siberian regions.

There is no easy and quick solution to this problem. Decline in quality of life in Siberia began in the Soviet period and escalated during transition. However, the material cited in Box 6.4 with reference to the Republic of Buryatia shows that policies, which aim to improve life quality and achieve specific results, can bear fruit even in critical socio-economic conditions.

Unemployment is a general problem in Siberia, and half of SFD regions have unemployment rates that are 1.5–2.5 times higher than the national average. Omsk is the only region where the rate differs little from the Russian average. However, gender inequality in employment is minimal. Female unemployment slightly exceeds male unemployment in several less developed regions in the south of Siberia (the Republics of Khakassia and Buryatia, Chita Region and in Altai Territory) due to general problems affecting regional labour markets.

Youth unemployment is a much more serious problem than gender unemployment in Siberia. Unemployment among 15–24 year olds in the SFD is twice higher than among the population as a whole, and youth unemployment in the Republic of Tyva is 38% of the economically active population (only Ingushetia has a worse indicator). The underdeveloped economy in Tyva fails to generate new jobs while the influx of young people into the labour market continues, since birth rates in Tyva remain high. Reduction of youth unemployment rates depends on general improvements in the situation on regional labour markets.

Figure 6.6. Quota of women in regional parliaments, %



The Siberian Federal District offers an extreme example of exclusion of women from public life. Female representation in regional parliaments has declined in three quarters of regions and Tomsk and Novosibirsk regions had no female deputies in 2004 (Figure 6.6). It is notable that these two regions have the highest overall education levels and host the largest higher education centers in Siberia. Evidently, education does not help to overcome gender barriers in politics. The quota of female representatives in the legislative authorities has increased only in the least developed regions – the Ust-Orda and Agin-Buryat autonomous districts and the Republic of Tyva.

The two main gender problems of modern Russia – low life expectancy for men and weak representation of women in political life – are both most acute in Siberia.

Environmental conditions in Siberia's towns and cities also requires urgent attention. The Millennium Development Goals refer only to emissions, which contribute to global warming, but regions in Siberia (and elsewhere in Russia) also have many other types of pollution and contamination to deal with. A third of the 20 Russian cities with the worse rates of pollution are in Siberia, including Norilsk – the most polluted city in Russia (Figure 6.7). The level of air pollution has declined in most Siberian cities during the years of economic growth (with the exceptions of Novokuznetsk and Bratsk), but there has not been any significant improvement of the environmental situation in Siberia.

As well as the environmental situation in its towns, Siberia faces the challenge of preserving the ecosystem of Lake Baikal, the world's largest freshwater lake. This issue is dealt with in Box 6.5.

Housing conditions in the Siberian Federal District leave much to be desired, as shown by relevant indicators. The quality of housing stock in the SFD is low: in 40% of regions the share of housing in a dilapidated and dangerous state of repair is 2–5 times higher than the national average and is continuing to rise (Figure 6.8). Budget allocations for housing maintenance are insufficient to overcome a legacy of underinvestment in social infrastructure, dating back to Soviet times (construction of low-quality and barrack-type housing is an unfortunate tradition in Siberia). The situation in the less developed autonomous districts and in the Republic of Tyva is now critical: 14–16% of housing is essentially unfit for habitation.

Underdeveloped social structure and communications in Siberia

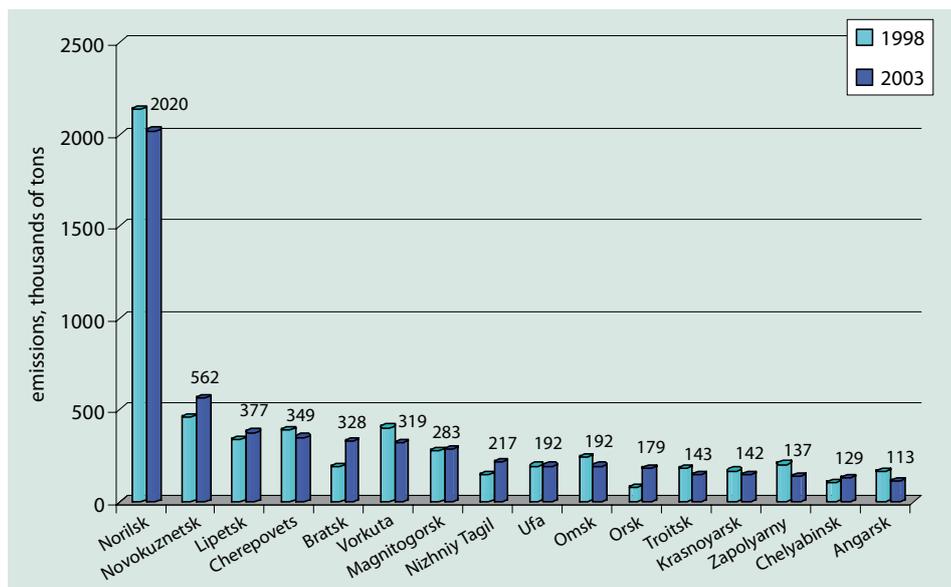
are another Soviet legacy. Provision of mains water and sanitation is below the Russian average in nearly all Siberian regions, despite high levels of urbanization in about a third of them. This is explained by the specific nature of urbanization in Siberia: large numbers of so-called "urban-type settlements" were built in Siberia during the Soviet period, which served extraction industries and were urban in name only, lacking any real urban infrastructure. Indicators for Siberian regions with mainly rural populations are even worse: in the regions east of Lake Baikal – Buryatia and Chita – less than half of housing has mains water and sanitation, in the Republic of Altai the figure is just one quarter, while the Buryat autonomous districts show figures of just 4–7% and housing in Evenkia is nearly all without main water or sewerage. In terms of living conditions, a significant part of Siberia has barely emerged from the 19th century.

Most Siberian regions also have underdeveloped landline telephone networks. This is particularly true in southern Siberia (from the Republic of Altai to regions east of Baikal) where telephone penetration in cities is only 50–80% of the Russian average and 40–70% in rural areas. This is despite large distances between settlements, which make telephones essential.

Development of cellular communications reflects differences in the pace of modernization between Siberian regions. The leaders are Tomsk and Novosibirsk regions, which host the largest educational centres in Siberia, followed by other relatively developed regions with large cities and high personal income rates (Figure 6.9). In the underdeveloped republics and remote regions east of Baikal low purchasing power and poor infrastructure limit growth of cellular communications. Once again, the Republic of Tyva is the absolute outsider: in 2004 just 1% of its population were mobile users.

MDG indicators emphasize the lag between Siberia and the rest of Russia in main aspects of social development. The tradition of a raw materials economy with

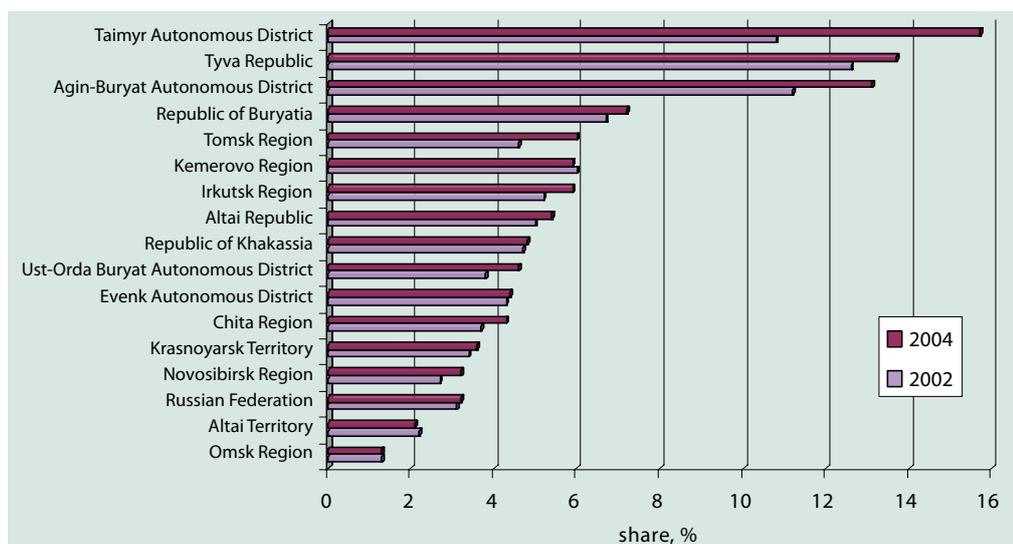
Figure 6.7. Cities with highest levels of atmospheric pollution, thousands of tons



insufficient attention to people's needs has proved hard to break, and the problems (income inequality, social diseases, gender disproportions and lack of infrastructure) are becoming more serious. Disparity between Siberian regions is also becoming more marked: personal incomes in economically developed regions with export-oriented economies are growing faster, and the income deficit of those below the poverty line is decreasing, but poorly developed regions and autonomous districts are lagging further behind. The least developed region in Russia, the Republic of Tyva, is located in Siberia.

Successful social development in Siberia is a complex and expensive challenge. There will never be enough

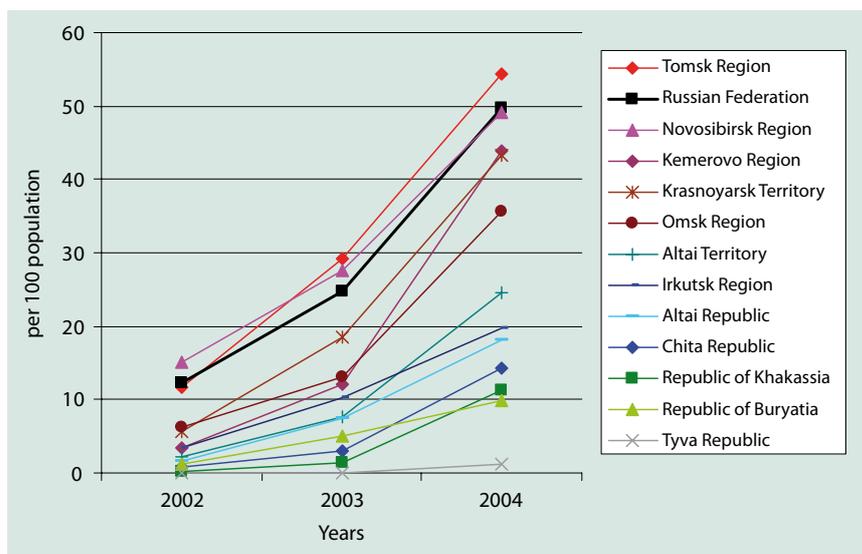
Figure 6.8. Share of housing in dilapidated or dangerous state of repair in regions of the Siberian Federal District, %





Chapter 6. Siberian Federal District. Building Wealth

Figure 6.9. *The rate of mobile phone network penetration, per 100 population*



money to provide social infrastructure across the whole of such a vast and thinly populated area. Experience of other northern countries has shown that social modernization starts from cities, which become genuine development centers for the surrounding territory. Another essential trend is gradual concentration of the population in more developed regions (this is already happening in Siberia). Finally, it is important to provide social services (particularly health services) in a mobile form to reach populations in distant locations.

UNDP is providing assistance in several regions of the Siberian Federal District, including a project "Assistance to reform of local self-government in the Russian Federation" (2003–2006), which is being implemented jointly with the Regional Development Ministry of the Russian Federation in the Republic of Buryatia and Irkutsk Region (Box 6.6).

Box 6.1. Human Development and Achievement of MDGs in Irkutsk Region

Irkutsk is a mid-ranking region in terms of development, but stands out by its rate of population loss in recent years. Population in Irkutsk Region shrank by 10% in 1991–2005 and now stands at 2.5 million. Irkutsk is 30th among subjects of the federation measured by GRP. Its industry, which represents a third of regional GRP, is focused on raw materials (timber, minerals) and semi-products with small added value, which are sold outside the region. Production of hydroelectricity is also a major business in the region. The raw materials bias explains the large gap between economic potential of the region and the living standards of its population.

Social indicators are worse than economic indicators. The MDGs most relevant to Irkutsk are those concerned with public health and overcoming poverty. Irkutsk ranked 75th in Russia for life expectancy in 2004 (the indicator declined from 61.9 to 60.8 years in 2000–2004), and it is one of the worse regions in the country for spread of HIV/AIDS, tuberculosis and drug addiction.

The Region's socio-economic development programme up to 2010 uses the Human Development Index as a basic indicator for the first time, targeting 8% improvement of the HDI compared with 2005. Human development has been put forward as a priority goal of the Region's socio-economic development strategy.

Goal 1. Reducing Poverty

The share of the population with per capita income below the subsistence minimum dropped from 31% to 21% in 2003–2005, but remains significantly higher than the Russian average (16%). High poverty levels in Irkutsk Region are related to low incomes, arising from dependence of many urban settlements on a single employer or industry that is in economic depression. In this situation the work-

ing population has also low incomes. Average per capita income in Irkutsk Region was 85% of the national average in 2004, while the subsistence minimum was 10% higher than the Russian average. The figures are made worse by inclusion of Ust-Orda Autonomous District where poverty levels are the highest in Russia (76% in 2005) and which ranks 87th among Russia's regions by personal income levels.

Poverty is most widespread in rural areas and small towns. The number of people in need of social assistance – pensioners, people with special needs/disabilities (including children), orphans and children without parental care and families with many children – is on the increase. As of January 1, 2006, 191,300 families were receiving child benefits, i.e. their per capita income was below the subsistence minimum. About 94% of families with three or more children have per capita incomes below the subsistence minimum.

A special programme to reduce poverty, raise incomes of the working population and stimulate salary increases was prepared in 2004, but has not been approved for implementation. According to data presented in the programme, families of the working poor accounted for 60% of those living in poverty in Irkutsk Region. The current programme, "Social assistance to the people of Irkutsk Region", aims to support socially vulnerable groups in accordance with Russian legislation.

Goal 2. Increasing Access to Education

The problem of access to education only exists for pre-school children, for whom there are insufficient kindergarten places in large cities. In 2003 Irkutsk Region had only 605 places per 1000 children aged under 6 and in 2004 the figure dropped to 599. The level of provision for school-age children is improving due to declining numbers of children in the Region: the percentage of children attending afternoon

Box 6.1. Human Development and Achievement of MDGs in Irkutsk Region (*continued*)

and evening sessions at schools has dropped from 30% to 24 % over 5 years.

The problem of access to higher education is purely economic, being determined by low incomes, and Irkutsk ranks quite highly (13th place among Russian regions) by the number of students in higher education per 10,000 population. Irkutsk is the largest educational centre in Eastern Siberia, and Tomsk and Novosibirsk are the only Siberian cities with better provision of higher education provision.

Goal 3. Ensuring Gender Equality and Improving the Situation of Women

The most serious aspect of gender inequality in the region is the 15-year gap in life expectancy between men and women (54 and 69 years respectively – both figures are on the low side). Mortality among men of working age is three times higher than among women of working age, and men in this age group account for 43% of total male deaths. Key causes of excessive male mortality include behavioral patterns, particularly alcohol and drug abuse.

Gender inequality in education tends to favour women. The number of female students in higher education rose by 6% in 2004–2005 compared with the previous year and women were 56% of total students. However, the highest percentage of female students is found in teacher training (74–75%) and medical high schools (67–77%), which mostly lead to poorly paid public sector jobs.

The share of women in the able-bodied population is also growing due to their longer life expectancy and educational potential. However, participation of women in decision making on the regional level is still low and numbers of women in executive positions in government are particularly low. The previous Irkutsk regional parliament had only one woman among its 45 deputies and the present parliament has 4 (9% of total membership). The number of women in local self-government has risen: women were 63% of all those holding elective office in executive and representative local government. But it should be emphasized that women are most numerous in government of the 355 rural areas and small towns in Irkutsk Region, which have serious budget constraints and where representative office is not paid (women have 74% of representative positions there). The proportion of women among deputies of the Region's 36 urban districts is much lower (26%), and there are only 2 women among 36 mayors of urban districts, while 127 (35%) of 355 heads of administrations of towns and villages are women.

Irkutsk has been carrying out regional action plans since 2002 aimed at improving the situation of women and enhancing their role in society, and NPOs have been invited to work alongside government structures in designing the latest plan (for 2006–2010). These plans mainly focus on helping women to perform functions related to family and motherhood, but the latest plan contains new gender strategies developed by women's and other NPOs, including combating domestic violence, prevention of drug and alcohol abuse, preventive health, and gender equality in education. Over 120 NGOs, including women's organizations, partnered with local author-

ities to design the "Programme for socio-economic development of Irkutsk Region in 2006–2010 and up to 2020".

A series of international forums "Women for Survival of Our Planet" have been held in Irkutsk since 1996, organized by the Angara Women's Union and the Coalition of Women's Organizations. More than 2550 people attended the most recent forum. The Angara Union provided a basis for creation of the UNDP Regional Centre for Women. The "Programme for gender development in the Siberian Federal District" was designed with support from UNDP and 6 other UN agencies as well as government structures and NGOs. This Programme offers a strategy for realisation of the gender aspect of the Millennium Development Goals, summarizing the experience of international, federal and regional strategies and actions for gender development, using recommendations and guidelines of the Beijing Platform for Action and each of the eight MDGs. Specific tasks and measures have been defined for achievement of the Goals, taking account of specific development conditions in the Siberian Federal District, and indicators have been designed to help measure outcomes. Unfortunately, the "Programme for gender development in the Siberian Federal District" has not been used in design of socio-economic programmes for Irkutsk region. But women's organizations supported by other NGOs have had major impact in other directions.

A network of crisis centers now operates in the region, set up by various women's organizations. The regional women's programme for 2006–2010 includes a number of measures to combat domestic violence, and to consolidate and develop a network of crisis centers. Information campaigns are being carried out, as are specialized expert training seminars for medical staff and law enforcement officers. Another programme run with support from women's organizations is "Prevention of Human Traffic". There are lectures at schools, seminars and training courses on finding employment, a special hotline and a "Safe House" programme. Women's organizations have also set up a new campaigning body, "Mothers Against Drugs". Schools and higher education institutes are following suggestions made by women's organizations concerning peer-group trainers, special actions and new forms of social advertising.

Much attention is given to educational programmes aimed at boosting potential of women's and non-profit organizations and developing social initiatives among local communities. Grant competitions under the umbrella of a Provincial Community Assembly were introduced in 2000 with backing from the Joint Council of NPOs and the Irkutsk regional administration. The competition is held annually with financing from the regional budget and aims to support civil initiatives, which are deemed to be of public importance. More than 1200 projects have been submitted and over 400 have received approval. Many of these have gender relevance and a special "gender and society" division of the grant scheme has been set up: more than 30 projects focused on gender development in Irkutsk Region have received funding, including a single fathers' club, an information campaign for combating human traffic, a girls' leadership school, etc. The main point of the Provincial Community Assembly is



Box 6.1. Human Development and Achievement of MDGs in Irkutsk Region (*continued*)

to help teach people basic skills of social planning, understanding their own needs, and presenting coordinated, well-planned activities to meet those needs.

A gender-conscious budget is an important component of gender policy. The Coalition of Women's Organizations has helped to implement "Transparent Budget" technology in operations by local authorities and administrations. Gender-conscious analysis of budget allocations to young people and of educational policies has been carried out, and conclusions and proposals have been presented at public debates in the regional parliament. Two gender experts serve on the public council of experts, attached to the parliament's committee on budget, price formation and financial, economic and tax law. The council assesses the Irkutsk regional budget from a gender viewpoint and results are presented at public hearings. Training seminars on the theme "Transparent budget with public participation" have been held in many parts of Irkutsk Region.

A series of publications, "Baikal Women's Initiatives", has appeared, which presents approaches to solving social problems, and a number of business-development organizations have been set up (the Angara Plus Women's Centre, Baikalia Tourist Information Net). Angara Plus works to support business initiatives by women. Annual competitions are held to find the Region's best female manager, and socio-economic development programmes for the city of Irkutsk and the Region include proposals for development of female small business as a tactic for combating poverty. Baikalia is focused on ecology and development of the tourist industry around Lake Baikal. Baikalia and other NGOs are particularly concerned with conservation of Lake Baikal and have campaigned against construction of an oil-pipeline along its shores. The regional administration and general public gave their support to this campaign, leading to cancellation of the project.

Goals 4 and 5. Reducing Maternal and Child Mortality

Irkutsk was among the regions with high maternity and infant mortality rates in the 1990s. Special measures have helped to reduce infant mortality from 16.1 per 1000 babies born in 2000 to 12.5 in 2005, but the region is still in the bottom third of Russian regions by this criterion. One of every three children who dies in the first year of life is from a family with high social or medical risk profile. Under-5 mortality was 16.5 per 1000 in 2005, which is still significantly higher than the national average. Maternal mortality in the region also remains high, although there was a drop of 29% between 2000 and 2004.

A new analytical department was set up in 2006 at the main regional perinatal centre to monitor and investigate infant and maternal mortality. The department also monitors progress of pregnancies among women in high obstetrical and perinatal risk groups. Observations were already carried out before creation of the special department: in 2005, 184 babies were kept under observation and several of them were transferred to clinics in Moscow and Novosibirsk. Organization and practice at the regional children's clinic has

been modernized. New initiatives also include monitoring of children from poor families in kindergartens and schools.

A regional target programme "Healthy Child – Safe Motherhood" has been operating in the Irkutsk Region since 2000 and mobile medical teams have been in operation since 2004 serving children in remote parts of the Region. These salaried teams use equipment from the "Healthy Child" programme, and carry out routine medical examinations. Medical institutions in rural areas and small towns are receiving new life-saving and rehabilitation equipment, and paediatricians have been trained to provide medical aid to children away from the clinic. The same programme has sponsored purchase of computer equipment to simplify routine examinations in short-staffed regional hospitals.

Goal 6. Combating HIV/AIDS, Tuberculosis and other Diseases

Irkutsk is among Russian regions most affected by spread of HIV. The number of people in the region diagnosed HIV-positive was 20,670 at the beginning of August 2006, including 267 children. Until recently, spread of HIV was driven by spread of drug addiction, and the majority of victims were among the unemployed and those serving custodial sentences. But there was a surge in sexual transmission of the disease in 2004, when sexual contact was responsible for 43% of new cases. The infection is beginning to spread beyond the high-risk group to the rest of the general public, who are not involved in drug abuse. Another worrying trend is rise in the number of HIV-infected women of childbearing age and transmission of the infection from mother to child. HIV-positive mothers have produced 2068 children to date.

The regional HIV/AIDS-prevention service consists of the Irkutsk Regional Centre for Prevention and Control of AIDS, branches of the Centre in 5 other cities, and 29 local screening laboratories. A regional target programme to combat HIV and AIDS has been in operation since 1998, and its financing has increased by 6 times since 2000. The largest share of these funds goes towards acquisition of anti-retrovirals and diagnostic systems.

The programme has included training seminars for medical staff, psychologists and volunteers dealing with virus carriers, as well as an AIDS prevention campaign in the media. In 2005, 25 preventive programmes with total budget of 11.8 million roubles were operating in the region. Anti-HIV and AIDS programmes had been approved in 32 out of 37 of the urban districts in Irkutsk Region by 2005 and financing of these programmes had begun in 23 of the districts.

Preventing spread of the infection from mother to child is an important part of the battle against HIV. Irkutsk Region uses a staged system for preventing mother-child infection, including treatment of the embryo while still in the womb, and the system can reduce risk of virus transmission to 1.5%. However, impact is limited since most of the virus carriers among pregnant women are socially maladapted and slip through the net of antenatal care: the chances of preventing transmission to the child are much less if nothing is done until after birth.

Box 6.1. Human Development and Achievement of MDGs in Irkutsk Region *(continued)*

In 2006 funds allocated by the regional budget for treatment of HIV were supplemented by federal transfers as part of the national project for combating HIV-AIDS. However, efforts to date have not been able to curb spread of the infection in Irkutsk Region. Efforts have focused predominantly on medical aspects of the problem, aiming to make life easier for HIV-infected and AIDS patients, but negative social aspects, which encourage drug use and spread of HIV, have not been addressed. The Region lacks resources to tackle these root causes of HIV on its own.

Programmes to combat tuberculosis are in place at federal, regional and local level in Irkutsk Region, and all aim to make action against tuberculosis more effective, to improve quality of personnel, equipment and medicines at diagnostic and treatment centers. Federal assistance accounts for 72% of total financing, but overall financing is still insufficient to provide adequate – anti-tuberculosis medication, to ensure that diagnostic equipment is up to date and in good order and to provide specialised tuberculosis diagnosis and treatment centers in all localities. Tuberculosis incidence and mortality rates have continued to rise as a result.

Goal 7. Ensuring Environmental Sustainability

Environmental sustainability is of tremendous importance to Irkutsk Region. The Region's economy depends on raw material extraction and processing, so employment and personal incomes of its population depend on proper management of natural resources. Rapid industrialization placed a large man-made burden on the environment, leading to negative effects on public health and putting limits on further industrial development in the most economically advanced part of the region. Irkutsk and Bratsk have long numbered among the most polluted cities of Russia, and the town of Shelekhov joined this list in 2000. The most industrialized part of the Region is adjacent to Lake Baikal, whose unique natural features have earned it a place among World Heritage sites. A Russian federal law on protection of Lake Baikal calls for creation of special zones around the Lake, restricting or completely prohibiting certain kinds of industrial activity. However, this zoning plan has not yet been finally approved. Other nature reserves exist in Irkutsk Region in addition to the Baikal shoreline, and their total area is 3.1% of the Region's territory.

The state of housing and water supplies are important determinants of living standards. Irkutsk lags the Russian average measured by living space per person (19.4 sq m per compared with 20.5 sq m in 2004). The share of housing in dilapidated and dangerous condition is also high (5.9% of housing 2004) and is growing due to low rates of new construction. The Region is also below the Russian average for mains water provision (68% of housing in Irkutsk and 76% of housing in Russia as a whole in 2005) and sewerage (66% of housing in the Region has sewerage and this figures has been constant for several years). However, these figures are better than averages for the Siberian Federal District.

The regional authorities and civil society have worked together on protection of the environment. Ecological education has been developed with assistance from inter-

national organizations, and the Region passed a law on ecological education and awareness in 2003. About one third of the Region's schools now study ecology as part of their curriculum and the Region has 12 institutes offering higher education courses with ecological themes. These methods of raising ecological awareness are highly important in cities with adverse environmental conditions.

The problem of environmental sustainability in Irkutsk Region is likely to become more acute in the future, since development prospects for the next decade are based on natural resource extraction projects in the north and east of the Region (sometimes referred to as a "second industrialization" of Irkutsk). Forthcoming unification of Irkutsk Region with Ust-Orda Buryat District is also expected to stimulate new projects and attract new financing from business and the federal budget, which the region intends to use for development of special economic zones, including development of a tourist and recreation complex on the shores of Lake Baikal and a uranium-processing plant in the city of Angarsk. Another project is for creation of a new agglomeration uniting the cities of Irkutsk, Angarsk, Shelekhov and adjacent territories.

Goal 8. Forming Global Partnerships for Development

Irkutsk Region is making steady progress with achievement of this Millennium Development Goal. Over the past 5 years the number of fixed telephone lines has increased by 1.8 times thanks to presence of competing telephone companies on the market, although the gap between regional indicators and the Russia average is still large (in 2004 the region ranked 63rd by fixed-line provision). The situation in rural areas is particularly critical, since the Region's vast area makes infrastructure maintenance very costly. Fixed-line provision in rural areas rose by 25% in 2000-2005, but the Region still ranks 82nd in Russia by this indicator (only the most underdeveloped regions such as Dagestan, Tuva and Agin-Buryat Autonomous District fare worse).

The prospects of achieving Millennium Development Goals in Irkutsk Region depend largely on federal policy. The most urgent task is to combat spread of HIV/AIDS, tuberculosis, drug addiction and other social diseases by attacking root causes of these problems. That requires a new system for integration of young people into adult life and increase of decent job opportunities for them.

Influx of new investments in the extractive industries will stimulate income growth and reduce poverty. But mechanisms of social optimization function poorly in a region, which is predominantly dependent on extractive industries, where local business is underdeveloped and which is dominated by large companies. Reduction of income inequality may therefore prove a harder task than at first appears.

Stable growth of global partnership indicators has been ensured by successful development of information services in Irkutsk region, as competition forces providers to work harder to win customers. Positive trends of environmental sustainability indicators are mainly due to strong civil movements and involvement of the general public.



Box 6.2. Altai Republic in the Context of the MDGs

The Republic of Altai is a relatively small region, with population of 204,500 in 2006. More than half of the Republic is covered by mountains, and it is one of the most sparsely populated subjects of the Russian Federation. The largest urban centre is Gorno-Altai (also the Republic's administrative centre) with population of 53,500.

Socio-economic indicators put the Altai Republic in a group of heavily subsidized agrarian regions with low levels of economic development and poor living standards. Industrial enterprises are unevenly distributed, but mainly concentrated around the Republic's capital. Districts further away from Gorno-Altai tend to have lower levels of socio-economic development and poorer quality of life.

Goal 1. Reducing Extreme Poverty

Monetary incomes have been consistently low over the past decade. Only one region of the Siberian Federal District – the Republic of Tyva – has lower income indicators than the Altai Republic. The lowest income quintile accounted for 8.5% of total incomes in 2005 and 9% at the end of the first half of 2006.

The funds Coefficient (ratio of incomes of the 10% best-off to incomes of the 10% worst-off) is not much different from the average Russian level, standing at less than 7 times as of 1 July 2006.

The federal policy of subsidies to certain regional budgets to overcome skewed development of different Russian regions has significantly improved per capita budgetary provision in the Altai Republic in recent years. However, no significant changes in relative personal incomes of the population have been achieved. The average per capita income stood at 52% of the Russia average and 64% of the average in the Siberian Federal District in 2001, and these figures were little changed in 2005 at 54% and 67% respectively. Continuing rise in the cost of living has an aggravating effect, preventing a significant percentage of people from escaping poverty. The subsistence level in 2005 was 22.7% higher than in 2004 and rose by further 26.4% in the first six months of 2006. Poverty levels in the region are declining at a slower rate than average per capita income levels are growing.

The main technique used to combat poverty is to stimulate employment. Unemployment rates in the Republic dropped from 15.9% in 2000 to 9.1% in 2005. As of 1 July 2006, unemployment in Altai Republic stood at 8.6% (below the average rate of 9.6% in the Siberian Federal District). People with secondary education but no special training represent the largest group among the unemployed (38.5%). Youth unemployment rates are high: 21% of the population aged between 15 and 24 is out of work. The regional labour market offers very few opportunities for young people with university degrees in law and economics, but qualified professionals are in great demand (for example) in the construction industry.

Improving quality of life, combating poverty and reducing unemployment rates all depend directly on economic development, which is not moving ahead quickly at pres-

ent. A so-called Institute of Social Investors was set up in 1998, by which the regional government gives investors in the Republic's social infrastructure special tax exemptions at local and republican levels. Investments thanks to this mechanism were 45 million roubles in 2005.

The Republic has designed a medium-term programme of socio-economic development for the period 2006-2009 and the regional parliament is hopeful that it will serve as a way of overcoming economic depression and poverty. Priority sectors for development will be tourism and leisure: a new tourism and leisure zone is being prepared, and work is underway to build and upgrade sanatoria and spa facilities. The Russian government is ready to invest 14 billion roubles in development of the leisure industry in Altai and the Republic's government has signed investment contracts with the business community worth 6.6 billion roubles. Planned projects include reconstruction of Gorno-Altai airport and a motorway to China. Gorno-Altai University introduced a new course in tourism management from 2006.

Success of this programme for boosting the economy will create more resources for tackling priority social tasks, modernizing social infrastructure and attracting private investment. Target outcomes include reduction of registered unemployment from 4% to 3.5% and a 25% rise in youth employment rates, as well as reduction of child disability rates from 30 to 22 per 1,000.

Goal 3. Ensuring Gender Equality and Improving the Situation of Women

There are 96,900 women living in the Republic of Altai (52.5% of the total population). The gap between life expectancy for men and women is 13.8 years compared with the Russian average of 13.4 years. As elsewhere in Russia, the share of men among all those working or seeking work is higher than the share of women (69.4% and 60.5% respectively). However, male unemployment rates, according to ILO criteria, are also higher. The share of women in the workforce outside agriculture is 54%. Wage levels of men and women are practically equal.

Among the 41 member of the regional parliament (El Kurultay) only 6 are women (15%), while municipal and district councils have 58 women among their 207 deputies (28%). The share of women in executive government posts was 68% as of 1 January 2005, but women tend to occupy lower-ranking positions.

Goals 4 and 5. Reducing Child Mortality and Improving Health of Mothers

Infant mortality rates in the Republic far exceed Russian averages. Main causes are respiratory diseases, congenital abnormalities, perinatal pathology, traumas, intoxications and accidents. Accidents were responsible for about a third of all infant deaths in the region in 2005, mainly due to social conditions of families, which include alcoholics.

Infant mortality dropped from 18 to 14 cases per 1,000 live-births in 2004-2005, thanks to well-coordinated joint

Box 6.2 . Altai Republic in the Context of the MDGs (*continued*)

efforts by the Republic's Ministry of Health and health care institutions. An entirely new system was introduced in 2005 for transfer of newborn babies from outlying districts to the Republican children's hospital and new standards of antenatal care were put in place, which take account of all health risk factors. The medical services now have specially equipped ambulances with incubators designed for transporting newborn children.

Two republican target programmes, both addressing maternal and child health, have made extra financial and technical resources available for care of mothers and young children. A new fully-equipped intensive care ward has been commissioned at the Gorno-Altai Maternity Hospital, which also serves as the Central Republican Maternity Hospital, and rooming-in wards have also been introduced.

All in-patient and out-patient clinics and hospitals have been equipped with modern ultrasonic diagnostic facilities to help in screening of pregnant women for possible foetus pathologies. About 82% of expectant mothers now undergo antenatal screening.

Telemedicine is increasingly used for consulting and monitoring of pregnant women with high risk of foetus pathologies. In 2004–2005 telemedicine equipment was purchased for all central district hospitals, and installation is now being completed at the last four hospitals.

Goal 7. Ensuring Environmental Sustainability

Environmental sustainability is crucial for development prospects in the Altai Republic, which are linked to the tourism and leisure industry. The situation today is relatively satisfactory compared with other Siberian regions. Conservation areas and parks cover 24% of the Republic. But efficient use of this potential is hindered by remoteness, infrastructure weakness, shortage of qualified professionals, and limitations on development due to need to respect conservation requirements.

Significant reserves of underground water could be used for water supplies in the Altai Republic, but there is currently a shortage of drinking water in Gorno-Altai. Up to 60% of the mains water supply system in large villages is in a critical state due to long use without maintenance. Excessive amounts of electricity are used for pumping purposes due to leaks from water pipes.

The share of housing units in the Altai Republic with mains water is very low at 25% only. Communities provided with running water facilities often fail to observe the sanitary rules and norms for management of water sources, there is no water metering equipment, and the pipe network is not properly maintained, which often leads to bacteriological contamination.

Wastewater discharge, of which 83% comes from housing, is another problem. The Republic's only facilities for water purification (including biological purification) are in Gorno-Altai.

The Katun water collector, which should overcome drinking water shortages in Gorno-Altai and Maymй, is

currently under construction as part of a federal water supply sub-programme. Regional budget spending on maintenance and repair of communal infrastructure in 2000–2004 was 140 million roubles (18.6% of total spending), of which 55 million roubles was used for maintenance and repair of water supply pipes and wells. Work is being carried out to renew a range of depreciated communal infrastructure assets, including renewal of water and heating systems in Gorno-Altai.

Goal 8. Forming Global Partnerships for Development

Like other Russian regions, The Republic of Altai has seen dramatic development of information and communication networks over the past five years. Fixed-line telephone coverage increased by 2.2 times in 1990–2004 and a further 389 lines were installed in 2005, of which 223 in villages and rural settlements. Registered numbers of mobile phone users rose from 37,000 in 2004 to 90,000 by 1 July 2006 (in 2006 mobile coverage was provided in the high mountain districts of Kosh-Agach, Ust-Kan and Ust-Coxin). Installation of 70 public telephones was carried out in districts of the Republic in 2006 and there are plans to install satellite communication sets in remote villages during 2007. Mobile Internet services are provided in rural schools where mobile phone connection is available as part of a programme by the cellular company, Beeline.

Provision of Internet connections in schools is a crucial task, in view of inaccessibility of many schools and low population density. To date, 23 schools have Internet connection and another 205 schools are due to be connected in 2006–2007. The company Intel carried out a training programme for teachers called "Studying for the Future" in July 2006 to support IT use in schools.

Regional social policy depends on support from the federal budget, and important mechanisms include federal target programmes and federal investment programmes with specified beneficiaries. The Republic is also implementing 60 of its own target programmes. About 3 billion roubles were spent on federal and regional target programmes in 2000–2005, and 60% of financing came from the federal budget. Most of the investments are in construction and reconstruction of social infrastructure.

Financial support from the federal government has led to the following achievements:

- reduction of infant mortality by 75%;
- 43% increase in the number of places in institutions, which care for the elderly and invalids;
- improvement in the pre-school education network;
- reduction in the share of pupils attending late shifts at schools from 27% to 23%.

Hepatitis B vaccinations were provided as part of the federal project for improvement of the nation's health and 42,700 people (21% of the total population of the Republic) have undergone HIV-tests. Medical examinations were carried out on 7,400 people of working age in 2006.



Box 6.3. Tomsk Region in the Context of the MDGs

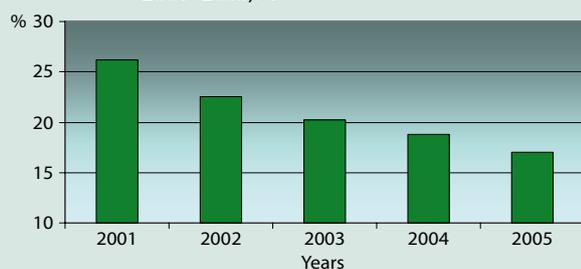
Tomsk Region is rich in natural resources and its development has been rapid. The economy grew at average annual rates of 9.5% in 2000–2004 compared with 6.8% in Russia on the whole. GRP of the region has grown by 57% in real terms over the past 5 years (the average figure for Russia was 39%), industrial output has grown by 70% (the Russian average was 38%), and real wages by 72% (67% in Russia as a whole). Real wages surpassed the 1998 level as early as 2001 and had reached 162% of the 1998 level by 2004. On the whole, Tomsk Region retains its leadership among regions in the Siberian Federal District with regard to key social indicators. The Region ranked 5th among all Russian regions in the Human Development Index in 2004.

Goal 1. Reducing Poverty

Like most regions with a predominantly oil-extracting economy, Tomsk region has large wage differentiations. Wages in the industrial sector are 3.1 times higher than in agriculture and 1.9 times higher than in education and health care. Average wages in the financial sector exceed the average in agriculture by almost 5.5 times. Large wage gaps between different sectors also divide the Region geographically: the wage leaders are oil-extracting districts and the capital, while the outsiders are agricultural districts and urban settlements mired in economic depression, where the problem of poverty is also acute.

The percentage of people living below the poverty line in Tomsk Region is close to the Russian average. There has been a steady decline in poverty levels over recent years from 26.2% in 2001 to 17.0% in 2005. A regional strategy for reducing poverty has been applied since 2004, which aims to improve regional social policies for dealing with poverty (Figure 6.10)

Figure 6.10. Decline in poverty levels in Tomsk Region, 2001–2005, %.



Goal 2. Increasing Access to Education

Problems with access to education are most pressing at the pre-school level. Studies by the regional administration have shown that low pre-school coverage in the Region is leading to significant disparities in ability when children enter school. Failure to increase numbers of pre-school facilities to meet demand is due to high-cost of kindergarten projects, which tend to involve new construction or conversion of existing school facilities, and shortage of financing for such projects. Lack of standards and norms for pre-school education is also a problem. Three focus

areas have been suggested for finding solutions to these problems:

- making provision of pre-school education more flexible (organizing part-time groups at secondary schools and other existing institutions, etc.);
- designing minimum standards for pre-school education and defining sources of financing;
- transfer to per capita financing of pre-school education with support from both the public and private sectors.

One more issue of access to education is that under per capita model of financing it turns out that maintenance of small one-room schools is costly, but their closure is not always justified due to problems of distance to other schools (67 schools in Tomsk Region are relatively accessible, but 174 are relatively inaccessible).

The federal Ministry of Science and Education is helping with a project to use Tomsk State Polytechnical University for training of teachers to work in one-room schools. Tomsk Region would thus be the pilot region for a training model that would later be duplicated elsewhere in the country.

Development of the system for preparing highly qualified specialists is essential for realisation of the Region's competitive advantages as a high-tech leader. Projects include creation of a multi-stage competitive environment at Tomsk Polytechnical University, aimed at motivating students to work in the most complex disciplines, attain more in-depth knowledge and learn to solve engineering tasks independently and innovatively.

The University curriculum also includes programmes to develop leadership qualities and skills, training for project management and team work as well as a second foreign language, summer natural-science and language schools, possibilities of inclusive education and study periods abroad on exchange programmes, and contracts with future employers prior to completion of studies. Creation of resource centres is also planned on the basis of already existing NGO institutions, using funds provided by large businesses, which need high-class, trained professionals, capable of handling modern equipment and using modern materials.

Goals 4–6. Reducing Maternal and Child Mortality, Combating Social Diseases

The most critical problem for Tomsk Region is high mortality rates, although they are lower than the Russian average and the average for the Siberian Federal District while birth rates are consistently higher than the Russian average. In 2004 Tomsk region ranked 6th among Siberian regions measured by birth rates.

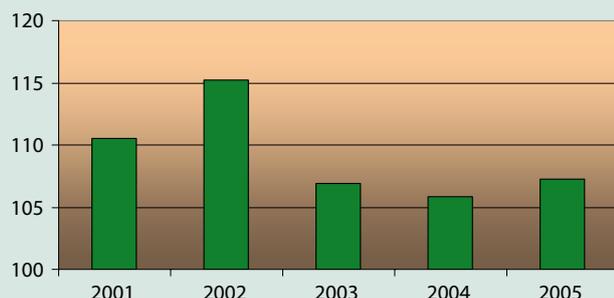
Infant mortality rates in Tomsk Region have declined in recent periods, but they remain higher than the Russian average.

High active tuberculosis incidence rates are also a characteristic feature of Tomsk Region, and they have consistently exceeded rates in the country as a whole.

Box 6.3. Tomsk Region in the Context of the MDGs (continued)

As of 1 January 2006, Tomsk region had 1007 officially registered cases of HIV infection, including 8 AIDS patients. The HIV incidence rate was 97.2 per 100,000. (Figure 6.11). These are moderate levels and significantly lower than the Russian average of 228.8 and the Siberian average of 224.3 per 100,000 (see Table 6.1).

Figure 6.11. Tuberculosis incidence rate in Tomsk Region, per 100,000 population



was in a state of intoxication, and due to serious circulatory, digestive, and other failures, which are brought on by alcohol abuse in every third case (according to post-mortem findings).

Goal 7. Ensuring Environmental Sustainability

Pollution from industry and other anthropogenic causes is a serious problem in Tomsk Region, and poses a threat to the environment and to the people of the Region, who find themselves unable to meet their physical and economic needs due to the adverse state of the environment.

Harmful atmospheric emissions in Tomsk region in 2005 totalled 402,800 tons (including automobile emissions). More than half of this amount was caused by the oil & gas industry. Pollution due to industry and to housing and utility infrastructure also has serious impact on water resources.

The level of soil pollution by dangerous chemical substances remains high, mainly due to the oil industry.

Table 6.1

Spread of HIV/AIDS in Tomsk Region, the Siberian Federal District and Russia, data for January 1, 2006

Region	Number of HIV-infected, per 100,000 population		In absolute terms	
	Total	Children	Total	Children
Russia	228.8	no data	1498	200
Siberian Federal District	224.3	no data	175	5
Tomsk Region	97.2	5.0	8	no data

The situation in the town of Strezhevoi and in Alexandrov District remains critical: HIV incidence rates there have reached 966.1 and 313.7 per 100,000 respectively. These regions account for 45.6% of all cases of HIV-infection in the region.

As regards more general health problems and the demographic situation, it should be stressed that the most dramatic rise in mortality over the past 10–12 years has been in working-age groups:

- 20–30 years – the main causes of mortality were: accidents, poisoning and traumas (about 70%);
- 45–55 years – the main causes of mortality were: cardiovascular diseases (about 29–30%) and accidents (25–26%).

On the whole, the structure of mortality in Tomsk Region is close to that of Russia as a whole. The biggest share is due to cardiovascular diseases (46%), followed by cancers and by accidents (14%), and poisoning and traumas (15.7%). Growth in the number of socially conditioned causes of mortality should be noted: deaths due to accidents and traumas, mostly when the victim

Accumulated mass of waste dumps in Tomsk Region had reached 17.2 million tons by the early part of 2005.

Goal 8. Participating in Global Partnerships in Accordance with Russia's National Interests

Nearly all types of telecommunication service provision in Tomsk Region are superior to the national average. The number of urban telephone network subscribers has increased significantly in recent years. Telephone density (the number of connected telephone lines per 1000 population) has increased from 233 to 351 over the past 7 years, while digitization of the fixed telephone network has reached 86.4%.

Tomsk Region is the leader in Siberia by mobile penetration with more than a million subscribers (as of 1 January 2006) and ranks 5th in the national Internet rating system. Annual rates of growth of Internet users have been close to 100%. Tomsk is in 3rd place, behind Moscow and St. Petersburg, by IT readiness and preparedness for e-government, which is to be developed by the Russian Ministry for Communications and IT and by the Institute for Development of the Information Society.



Box 6.3. Tomsk Region in the Context of the MDGs (*continued*)

Table 6.2

Indicators of sustainable development in Tomsk Region

Indicator	2001	2002	2003	2004	2005
Ratio of money income to the subsistence minimum, %	144.7	212.2	224.9	239.6	256.4
Income inequality (income ratio of the highest quintile group to the lowest quintile group)	6.48	7.08	7.10	7.45	7.43
Income deficit of low-income groups as a share of total personal incomes, %	4.2	3.2	2.7	2.4	2
Poverty rate, %	26.2	22.5	20.2	18.8	17
Infant mortality, per 1,000 newborn	16.7	17.9	17.2	13.8	13.2
Tuberculosis incidence rate, per 100,000 population	110.5	115.2	106.9	105.8	107.3
HIV incidence rate, per 100,000 population	56	72.9	80.9	89.3	69.8
Life expectancy (men), years	59.81	59.8	58.29	59.55	59.12
Life expectancy (women), years	71.97	71.81	71.34	71.72	71.4
Unemployment rate, %	10.12	12.91	15.06	11.34	11.48
Number of women in the regional parliament	0.00	4.76	4.76	4.76	4.76
Emissions (thousands of tons)	105.455	95.08	96.004	100.7	103
Share of housing in poor and dangerous state of repair, %	4.71	4.67	5.96	6.03	5.36
Mains water provision, %	73.3	73.6	74.1	73.8	75.1
Sewerage provision, %	66.6	67.5	67.7	68	68
Provision of fixed telephone lines in urban areas, %	70	62	76	80	82
Provision of fixed telephone lines in rural areas, %	51	54	49	53	55
Mobile penetration per 100 people	3.5	12.34	30.28	56.31	97.6

In 2005 the Tomsk regional administration designed a special development strategy for the region up to 2020 and a socio-economic development programme for the period 2006–2010, aiming to address human development issues while taking account of the Millennium Development Goals. The main objective of the programme is to ensure high living standards by:

- creating a dynamically developing, balanced and

competitive regional economy which can ensure high personal income levels;

- making Tomsk Region an excellent location for living, working and recreation.

In order to assess efficiency in implementation of this programme a system of benchmarks was used, including nearly all indicators of sustainable development for Tomsk Region (Table 6.2).

Box 6.4. Republic of Buryatia and the Prospects for MDG Achievement

Buryatia is a relatively small region in the southern part of Eastern Siberia. It covers 2% of the total Russian territory and has population of 969,000. Buryatia occupies a medium-low position in ranking of Russian regions by economic development, and is among the worst-off as regards poverty and unemployment. Nearly half of the Republic's budget (46.8% in 2005) consists of federal subsidies, and the Ministry for Economic Development and Trade ranks Buryatia 78th among Russian regions on a complex of indicators, i.e. among regions with the lowest development levels.

There have been improvements during the years of economic growth. GRP grew by 31% from 2000 to 2004, while industrial output increased by 58% and volume of retail trade rose by 83% over the same period. Real monetary incomes and real wages were 59% and 87% higher respectively. However, both average per capita income and average wages in Buryatia remain below the average in the Siberian Federal District (Buryatia is in 8th place among Siberian regions by wage levels). Major challenges faced by the Republic are reduction of poverty, improvement of the general climate for business and investments and attaining qualitatively new development levels. These tasks are directly linked to achievement of the MDGs.

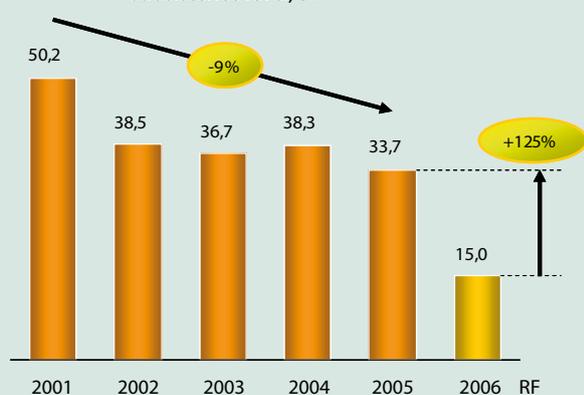
Goal 1. Reducing Poverty

Income inequality in Buryatia has remained roughly constant in recent years. The ratio of incomes of the top 10% group to the bottom 10% was 13.4 in 2004. The share of people below the poverty line was still very high at 33.7% in 2005, which is double the Russian average (see Figure 6.12). High poverty rates in the Republic are due to a long-established lag in economic development compared with the rest of Russia and slow recovery after the major recession of the 1990s. Overcoming poverty depends on creation of new jobs, reducing the economic development lag, and reducing dependence on federal subsidies.

Goal 3. Ensuring Gender Equality and Improving the Situation of Women

Women are fairly active on the labour market in Buryatia, with 53.9% of total employment in 2004 (estimates based on figures from large and medium-size enterprises). However,

Figure 6.12. Percentage of people with income below the subsistence level, %



female representation in politics is extremely low: only 6% (4 out of 65) of deputies in the People's Hural (regional parliament) are women.

Low life expectancy, particularly among men, is a major concern. The indicator for both sexes is unacceptably low, even by Russian standards, at just 61.1 years in 2004, representing a decline of 6.5 years compared with 1990. Average life expectancy for men is not only extremely low (54.6 years), but has also declined more drastically than the average (by 7.8 years since 1990).

Goals 4–6. Reducing child mortality, improving maternal health, combating HIV/AIDS, tuberculosis and other diseases

Infant mortality rates in Buryatia are higher than the national average, but there has been a notable decline in recent years: from 17.8 per 1000 newborn children in 2000 to 12.8 in 2005. Mortality rates among children under 5 years of age are 20% higher than the average indicator in Russia (16.7 and 13.9 respectively per 1,000 children of this age group). Maternal mortality in 2003–2005 was double the national average. The Republic suffers from high and increasing rates of active tuberculosis incidence. The number of people diagnosed with tuberculosis for the first time reached 159 persons per 100,000 population in 2005, which is almost twice higher than the Russian average. The rate among men in 2004 was 211 per 100,000, compared with 98 per 100,000 women. Tuberculosis mortality in 2001 was 18.7 per 100,000, rising to 23.0 per 100,000 in 2005, which is close to the Russian average. It should be noted, however, that tuberculosis mortality is twice higher among the 40–44 and 55–59 age groups.

Proximity to Irkutsk Region, which has become the epicenter for spread of HIV/AIDS in Russia east of the Urals, has led to rapid spread of the epidemic in Buryatia. The total number of HIV-infected persons in Buryatia in October 2006 was 3000, representing 270 per 100,000, which is higher than the national average.

The regional government is addressing these problems in its social policy, but available resources are not sufficient. A regional law, passed in 2006, ensures provision of adequate diets for pregnant and breastfeeding women and for children under three years old (adequacy is vetted by qualified doctor). Provision of diet supplements will be via a network of specially organized centres.

HIV-tests had been carried out on 12,600 people in Buryatia as of 1st September, 2006, and treatment for 80 HIV-infected persons was planned in 2006 within the framework of the Health national project. Special emphasis is placed on preventive action. There is a volunteer movement helping to combat HIV in Buryatia: its members carry out training and information events at schools and higher education establishments in the Republic.

Goal 7. Ensuring Environmental Sustainability

Industrial plants are mainly located in the cities of Ulan-Ude and Gusino-Ozersk and the North Baikal industrial area,



Box 6.4. Republic of Buryatia and the Prospects for MDG Achievement (*continued*)

which have become major centers of pollution. There are also pollution problems along main roads and railways as well as in large river valleys. Pollution elsewhere in Buryatia is low-level and dispersed. Main sources of pollution of surface water tracts are industrial plants and housing utilities, but in recent years there has been a tendency to reduction in the amount of pollutants discharged into surface water.

Atmospheric pollution is mainly from electricity and heat generating plants, housing utilities and motor transport, aggravated by weather in the colder seasons, which prevents dispersal of air pollution. There is also negative impact from forest fires. On average 86.2% of harmful atmospheric emissions in Buryatia are neutralized by filters (the level is 10 percentage points higher than the average in Russia). However, pollutant emissions per GDP unit in Buryatia have been increasing since the mid-1990s, indicating that current filtering technologies can no longer cope with emissions and that modernization of the economy is urgently needed.

Rates of mains water connection and proper sewerage are used as criteria to assess overall housing amenities. Rates of mains water and sewerage connection are 4–5 times higher in urban than rural housing. In 2004 the share of all housing in the Republic with mains water was only 50%, of which 74% was in urban areas. The share of housing with sewerage was 49%, of which 73% in urban areas.

The share of housing in poor or dangerous condition was very high at 7.2% of total housing in 2004. This problem is particularly grave in the northern areas of the

Baikal-Amur Railway: the share of poor or dangerous housing in Mui district is 46% and shares of such housing in the town of Severo-Baikalsk and in Severo-Baikalsk District are 26–28%. Northern areas of Buryatia also have the highest percentages of unsafe housing: 9% in the town of Severo-Baikalsk and 6–7% in Severo-Baikalsk and Bauntov districts. The problem arises from the fact that most housing built along the Baikal-Amur Railway at the time of the railway's construction was meant to be temporary and is now critically depreciated. The need to re-house people living in these areas has been repeatedly raised with federal government, but a solution has not yet been found.

Goal 8. Forming Global Partnerships for Development

Communications infrastructure in the Republic is inadequate. Buryatia ranks 78th among Russia's regions by the number of telephone subscribers per 1,000 people in cities, with rates that are 40% below average indicators for Russia. Buryatia is 61st in Russia by telephone line provision in rural areas, representing a smaller 12.5% gap compared with the rest of the country.

The past 2 years saw rapid development of mobile communications and there are currently three mobile operators in the Republic. Mobile penetration reached 46% in 2005, up from just 10% in 2004.

However, the coverage zones of both federal and local mobile operators is limited (many areas around Lake Baikal are inaccessible for mobile connection).

Box 6.5. Lake Baikal – What does it Mean to Russia?

Russia is the largest country of the Eastern hemisphere and has abundant water resources. Quality of groundwater is quite satisfactory *to date* and quality of surface water *to date* is higher than in many European countries (particularly if cities are compared). However, Lake Baikal stands out by any criteria due to its unique physical and geographical features and purity of its waters.

Situated in the south-east of Siberia the Lake has the world's single biggest volume of fresh water (23,000 cubic kilometers) with depths up to 1620 meters (1637 meters according to some estimates). Figures 6.13 and 6.14 out

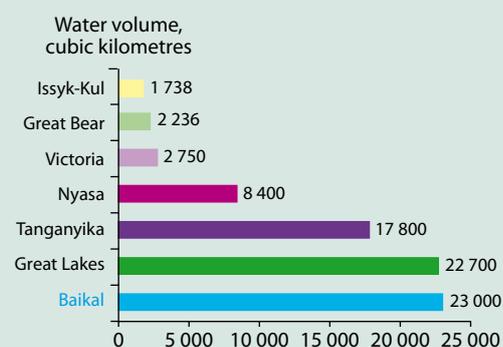
Baikal in the context of the world's other major lakes.

The Baikal basin contains one fifth of all the fresh water on Earth. The volume of water carried by all the rivers in Russia in one year (the country's river network is one of the greatest in the world) is only 10% of the volume of water in Baikal. The Lake covers an area between that of Belgium and Switzerland with a 2000-kilometer shoreline to which 300 rivers arrive and from which only one departs (the Angara River). The lake was formed at the place of a crack in the earth's crust about 22–23 million years ago, giving life to 2,630 species of flora and fauna, of which about 2000 are not met with anywhere else in the world. Baikal's shoreline includes 12 protected territories and 3 conservation areas where any type of economic activity is strictly prohibited.

UNESCO included Baikal and the adjacent area in the list of World Heritage sites in 1996.

The Russian government acknowledged the uniqueness and importance of Baikal in 1999, when it passed a federal law to ensure protection of the Lake (the first law ever passed at government level in Russia to protect a specific natural site). Preparation of the law saw an unprecedented public debate, including 1300 amendments put forward by NGOs, and its passage appeared to mean that Baikal was no longer subject to threat. However, non-governmental organizations, particularly those involved in ecological issues, still point regularly to multiple threats, which continue to hang over the Lake.

Figure 6.13 Water volume, cubic kilometres



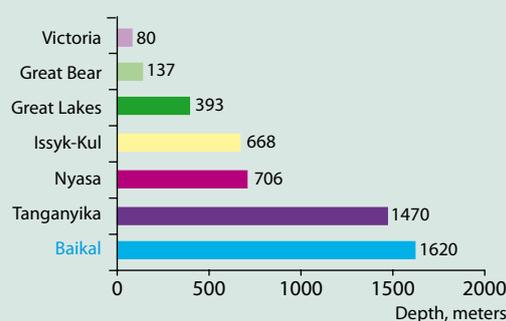
Box 6.5. Lake Baikal – What does it Mean to Russia? (continued)

Are there causes for alarm?

In the 1960s the Baikal Paper Processing Plant was built and commissioned on the shore of the Lake, contaminating the virgin waters. The government has passed dozens of directives to prohibit discharge of pollutants from the Plant, to redesign it or even to close it, but none of them have been put into effect. According to its technical documentation, the plant operates a closed cycle, meaning that polluted water should not be discharged into the Lake. In fact, however, monitoring of water near the plant indicates that contamination with phenol, sulphides and other chemical substances is growing year by year. Transparency of the water (a key indicator of the Lake's health) is decreasing, and the balance of organisms in the Lake, which has come about over thousands of years, is rapidly changing. This information is included in official annual government reports on Lake Baikal, but the facts, which are not officially reported, are more alarming: illegal felling of trees, forest fires, contamination by oil discharged from boats, and large-scale losses of the Baikal nerpa – the world's only fresh-water seal.

It may be said that the situation has not yet developed from a threat into a catastrophe. It may be said that the Lake can rejuvenate itself, since it reproduces more than a quarter of its waters (about 60,000 cubic kilometers) each year. That might be true if all man-made activities were to cease, not only along the Lake shore, but across the whole of the Baikal basin, which covers an area more than 18 times greater than the actual Lake surface, and 40% of which is in Mongolia. There are 140,000 people living on the shore line of the Lake and more than a million people in the Baikal basin. For many of these people the Lake is not only (and not so much) a sacred object, or a unique part of our global heritage – it is the only source, from which they can make a living. The Republic of Buryatia is ranked 71st in the Human

Figure 6.14. Depth, meters



Development Index out of 78 ranked Russian regions, and prohibition of economic activities on the Lake would exacerbate the poverty rates. An alternative strategy is therefore necessary, of combining economic growth with maximum levels of protection: a strategy of sustainable development of the Baikal area.

Sustainable development can mean compromises between the interests of people and of corporations and the victory of common sense. An example has been given by Transneft, a state-controlled pipeline transport company, which is building an oil pipeline from Eastern Siberia to the Pacific Ocean. It was initially planned to lay the pipeline just 800 meters from the shores of Baikal, but when environmental NGOs raised the alarm, it was decided to move the pipeline 400 kilometers to the north of the lake. The new project will require about one billion dollars of additional investments as well as research into construction techniques to deal with the permafrost highlands. But value of Baikal cannot be measured in money terms or in terms of slower or faster rates of economic growth.

Box 6.6. Support to the Project for Local Self-government Reform in the Russian Federation Project (Results in Siberia)

A joint project by UNDP and the Russian Regional Development Ministry for reform of local self-government is currently being implemented in two pilot regions (Republic of Buryatia and Irkutsk Region). Activities to date have included:

- adaptation of regional and local government procedures in the pilot regions to comply with the new version of the federal law on local self government;
- ensuring that local executive and representative government and NPOs in the pilot regions are equipped to carry out the local self-governance reform;
- increasing awareness in Russian civil society of the changed role of local governance, and involving the general public in local governance to a greater extent;
- giving comprehensive strategic recommendations and distributing legislative and administrative models based on experience in implementation of the project.

Several changes have been made to the new federal law based on experience in trying to implement it in the

pilot regions. For example, a problem which arose in the Republic of Buryatia during implementation of the Project concerned physical location of local government: the Project experts found that amendments were needed to allow the administration of a new municipal district to be located outside the territory of the old urban district, which it replaced without geographically coinciding with it.

Study of the situation in pilot regions also suggested that it might be necessary to relax the federal law requirement, which prohibits one and the same person from combining the positions of chairman of the representative body and head of the executive in municipal formations with populations over 1000. Lack of resources and people with necessary qualifications for these jobs in most rural settlements made the law requirement very hard to meet. These points were made at the federal level by regional authorities, and a new version of the federal law allows one person to combine these offices in all rural settlements, regardless of their population.