



# MILLENNIUM DEVELOPMENT GOALS IN KAZAKHSTAN

2007

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# **MILLENNIUM DEVELOPMENT GOALS IN KAZAKHSTAN**

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# ACRONYMS AND ABBREVIATIONS

AFB	Acid Fast Bacilli
ARI	Acute Respiratory Infection
CC	Criminal Code
CDC	Centres for Disease Control and Prevention
CIS	Commonwealth of Independent States
CoFH	Committee on Forestry and Hunting
DHS	Demographic and Health Surveys
DOTS	Directly Observed Treatment, Short-Course
EFA	Education For All
EIA	Environmental Impact Assessment
EISA	European Organisation of Information Technologies and Services
EurAsEs	Eurasian Economic Commonwealth
FEZ	Free Economic Zone
GDP	Gross Domestic Product
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GHG	Greenhouse Gases
HAART	Highly Active Antiretroviral Therapy
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
HPS	Hydro Power Station
ICA	International Council on Information Technologies and Public Administration
ICT	Information-Communication Technologies
IMF	International Monetary Fund
ITU	International Telecommunications Union
JSC	Joint Stock Company
LLL	Life Long Learning
M&ES	Ministry of Education and Science
MBT	Mycobacteria Tuberculosis
MDGs	Millennium Development Goal(s)
MDR TB	Multi-Drug Resistant Tuberculosis
MEP	Ministry of Environmental Protection
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MoEMR	Ministry of Energy and Mineral Resources
MOH	Ministry of Health
MOI	Ministry of Interior
MSM	Men Having Sex with Men

NC HLSP	National Healthy Life Style Promotion Centre
NER	Net Enrolment Rate
NGO	Nongovernmental Organisation
NTBC	National TB Centre
ODS	Ozone-Depletion Substances
OECD	Organisation for Economic Cooperation and Development
PCR	Polymerase Chain Reaction
PHC	Primary Health Care
PLH	People Living with HIV
PMPC	Psychological, Medical and Pedagogical Committee
PO	Pre-school Organisations
PSI	Public Services International
RK	Republic of Kazakhstan
SC	Stock Company
SGES	State General Education Standard
SPA	Specially Protected Areas
STI	Sexually Transmitted Infections
SW	Sex Workers
TB	Tuberculosis
TDS	Test on Drug Sensitivity
UN CSD	United Nations Committee on Sustainable Development
UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNT	Unified National Test
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
VIP	Very Important Person
WB	World Bank
WHO	World Health Organization
WITSA	World Information Technologies and Services Alliance
WTO	World Trade Organisation

## FOREWORD

At the Millennium Summit held in September 2000 the leaders of UN member countries including Kazakhstan adopted the Millennium Declaration, setting out principal Development Goals and Targets until 2015.

This Millennium Development Goals' Report brought to your kind attention is the result of close cooperation between the Government of Kazakhstan and the UN country team. It is prepared at a time when the world is halfway to the milestone designated in the Declaration and is assessing progress achieved to date.

The report analyzes the socioeconomic situation in the country and identifies achievements and problems that should be addressed towards the timely achievement of the Millennium Development Goals.

Reaffirming its commitments to the Millennium Goals and Targets, the Government of Kazakhstan has been taking significant efforts to implement its Kazakhstan 2030 National Development Strategy since the adoption of the Declaration.

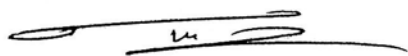
Attaching special importance to timely achievement of the Millennium Development Goals, the Government of Kazakhstan has integrated them into its mid-term programme of development until 2010 and into sectoral programmes of key ministries and agencies. The President of Kazakhstan in his address to the People of Kazakhstan (February 2008) emphasized that social well-being should come hand in hand with a higher quality of life and a higher quality of the nation's human resources.

At this stage of development, state policies are focused on building upon current achievements, improving the quality of life and sustainable development for the citizens of Kazakhstan. Efforts should continue to ensure the socioeconomic development of the country and bring it to a qualitatively new level.

Kazakhstan has already achieved a number of MDGs including poverty reduction, access to primary education and empowerment of women. At the moment, the country is commencing implementation of the MDG + agenda which is adjusted to the Kazakhstan context and stipulates higher targets and indicators.

By setting ambitious goals and targets to ensure a high quality of life for all, Kazakhstan intends to take the fullest advantage of the considerable accumulated potential of cooperation with the UN.

The Government of Kazakhstan highly estimates collaboration with structural agencies, funds and programmes of the United Nations Office in Kazakhstan particularly in implementation of the Millennium Development Goals and looks forward to deepening further our cooperation for the benefit of the people of Kazakhstan.



**Marat Tazhin**  
Minister of Foreign Affairs  
Republic of Kazakhstan



## FOREWORD

It is my honour to introduce to you the 2007 Millennium Development Goals' Report for Kazakhstan.

Since the Millennium Summit, the work of the United Nations Agencies has been guided by a set of goals derived from the Millennium Declaration, signed by world leaders in New York in September 2000 including President Nazarbayev. Called Millennium Development Goals (MDGs), they set well-defined and measurable targets for states to achieve by the year 2015 to improve the lives of millions of people. MDGs cover such crucial development areas as poverty reduction, improvement of child and maternal health, gender equality, combating major diseases, enhanced access to primary education and environmental sustainability. Different UN Agencies and Programmes take lead on different Goals, but in every case, in their work they cooperate with host governments, sister agencies, other donor organizations and civil society.

This is the third report for Kazakhstan. It is a result of joint work of the Government of Kazakhstan and the UN Country team. The report contains the latest available statistics and analysis. It has gone beyond a simple snapshot of the indicators and contains a set of rich discussions on how to move forward. I would like to take this opportunity to thank our national partners for their invaluable comments and contributions to the report.

Since Kazakhstan has already achieved some of the original targets of the MDGs such as poverty reduction, access to primary education and promotion of women's rights, the country is now in a solid position to consider an MDG+ agenda. This implies voluntary expansion of international MDGs in the spheres in which Kazakhstan has already achieved the original goals.

Kazakhstan is in a new stage of development. This new stage of development requires a new format for cooperation between Kazakhstan and the United Nations, whose work will continue to focus on national priorities. In the short term, it is to help further improve the social and economic conditions of all citizens of Kazakhstan and to enhance the country's overall competitiveness. Fortunately, the indicators for competitiveness contain all elements of the MDG framework. As Kazakhstan aims to implement the MDG+ agenda, the UN is well placed to support Kazakhstan's bid for competitiveness through the MDG+ prism.



**Haoliang Xu**

UN Resident Coordinator  
Republic of Kazakhstan

# INTRODUCTION

In September 2000, UN member states signed the Millennium Declaration at the Millennium Summit. The Declaration formulated major global development goals: to eradicate extreme poverty and hunger, to achieve universal primary education, to ensure gender equality and empower women, to reduce child mortality, to improve maternal health, to reduce the spread of infectious diseases, to achieve environmental sustainability and to develop a global partnership for development.

These goals are aimed to help the international community achieve essential, measurable results to improve quality of life by 2015. Having committed themselves to work towards achieving MDGs, the countries agreed to follow up on progress and publish regular reports.

The given report is the third related to MDGs in Kazakhstan. The first report on Millennium Development Goals in Kazakhstan, developed by the Government of the RK together with the UN team, was published in 2002 and became the first report of this type in the Eastern Europe and CIS region. In 2005, the UN country team in Kazakhstan and the government of the country developed the second MDG Report, which included the analysis and assessment of MDG achievements both at the national and oblast levels.

The year 2007 marks the mid-point between the adoption of the MDGs in 2000 and the target date for their coordinated implementation in 2015. Given that a number of objectives related to MDGs have already been achieved, the given report includes an MDG+ agenda, i.e. additional, more ambitious goals adapted for Kazakhstan, which are based on the analysis of the national priorities, national statistics, related national programmes and also on the experience of other countries.

# EXECUTIVE SUMMARY

Global experience shows that the most significant achievement in poverty reduction, in ensuring gender equity, in improving the health status and population education level, and in providing a combination of economic growth and environmental sustainability is determined by successful implementation of economic, political and social reforms. Kazakhstan has come a long way in this direction and has proved to the global community that consideration of complex issues depends on the preparedness of the state to recognize the existence of such problems and to undertake specific steps toward their resolution, for example, towards the implementation of programmes on poverty reduction, health reform, education, social security sector reform and the introduction of principles of sustainable development.

As can be seen from the report, Kazakhstan has already achieved some of the millennium development goals (MDGs) such as poverty reduction, access to primary education and increased rights for women. Kazakhstan has made progress on the rest of MDGs as well. However, there are still problems that need special attention from the government. For example, child and maternal mortality, HIV/AIDS and tuberculosis remain very serious. The state of the environment is also far from ideal.

As of today progress in achieving MDGs in Kazakhstan can be described as follows:

## Goal 1: Eradicate extreme poverty and hunger

This goal in its original version was achieved in Kazakhstan already in 2004. The achievement of the MDG 1 was due to the decrease of income poverty or extreme poverty. At the same time, given the objective of entering the 50 most competitive economies of the world, and the objectives of the long-term strategy until 2030, Kazakhstan should pay attention to opportunity-related poverty since the implementation of the country development plans depends entirely on the achievement of capacity-development objectives.

Accordingly, Kazakhstan can consider more ambitious targets in this field. It is important to revise poverty assessment criteria and define the poverty line (as a criterion for provision of targeted social assistance) at the level of total cost of the current consumer basket as is the case in the countries with sustainable developing economies. A new MDG 1+ target can be considered as a reduction by half of the proportion of people in rural areas with an income below subsistence minimum by 2015.

## Goal 2: Achieve universal primary education

This goal has also been achieved in Kazakhstan in its original version. At the same time, the target of providing equal access to quality education remains topical for Kazakhstan. There are problems with school attendance and maintenance of school enrolment, and the emergence of groups of at-risk children prove the fact that not all have access to education.

According to the Constitution and the Law on Education the state policy is targeted at ensuring access/equality and quality/efficiency of free mandatory general secondary education, which includes primary (1-4 grades), secondary basic (5-9(10) grades) and general secondary education (10(11)-11(12) grades). Thus, while confirming the status of primary education as an adequate provision, Kazakhstan has to view MDG 2+ as ensuring universal secondary education.

<sup>1</sup> Edict of the President of the RK № 310 of 06.04.2007 endorsing the Programme of the Government of the Republic of Kazakhstan for 2007-2009.

## Goal 3: Promote gender equality and empower women

This goal has been achieved in Kazakhstan in respect to liquidation of gender inequality in primary and secondary education. However, it should be recognized that differences in the position of women and men in Kazakhstan are still significant. Women are inadequately represented at the decision-making level; there is gender inequality at the labour market. New MDG 3+ priorities should include such targets as ensuring adoption and implementation of measures to increase the representation of women in legislative and executive bodies, ensuring legislative and executive measures to prevent and eliminate violence against women, and ensuring sustainable gender mainstreaming of national planning and budgeting, especially aimed at minimizing gender wage gaps.

## Goal 4: Reduce child mortality

This goal has not been achieved in Kazakhstan yet. Moreover, the scheduled introduction of livebirth criteria as of 2008 will result in the increase of infant mortality registration in Kazakhstan, which makes achievement of this goal hardly probable. Nevertheless, recognizing the importance of introducing this criterion the Government has declared a temporary moratorium on administrative measures for forecasted growth of these medical-statistic indicators<sup>1</sup> in the Programme of the Government of the Republic of Kazakhstan for 2007-2009. In this programme a complexity of measures is stipulated in order to resolve socially important health problems and to reduce maternal and infant mortality while systematizing specific approaches and measures successfully tested in the world. Hopefully these measures will be practically implemented in line with plans on a sustainable basis. Only concerted efforts will lead to the stabilization of this situation to ensure improvement and the eventual containment of the crisis in this sector.

## Goal 5: Improve maternal health

In the space of 2.5 years that have passed since the publication of the analysis of the progress made in achieving Millennium Development Goals by Kazakhstan, no considerable progress has been made with regard to reduction of maternal mortality ratio and ensuring universal access to reproductive services and goods. Given that to reduce maternal mortality after it has achieved a relatively low threshold level (which is the case in the country) is very difficult, and in the absence of significant dynamics of key indicators it is hardly probable that the maternal mortality ratio of 14 per 100,000 livebirths will be achieved.

There is a political commitment to mother and child health care, which is viewed as a priority by the Government. Urgent practical steps are necessary to implement this commitment. First of all the country needs a detailed reproductive health strategy that would include financial liabilities of the Government regarding its implementation, and possibly donor organisations.

With a purpose of mobilizing financial resources, sufficient for providing access to qualitative reproductive health commodities and services of enough high threshold for all, who need it, probably it is necessary to reconsider a parity of funds allocated for capital construction of expensive sublime establishments and funds directly allocated for reproductive health care.

## Goal 6: Combat HIV/AIDS and tuberculosis

**HIV/AIDS:** The Republic of Kazakhstan succeeds in maintaining the epidemic at the initial/concentrated stage (HIV is basically concentrated among injection drug users and sex workers). However, the possibility for the situation to develop in line with the worst scenario is great given that the behaviour of risk groups is not safe, awareness of young people on HIV transmission modes and ways to prevent infection is inadequate, and safe behaviour in terms of HIV infection is not always practiced.

A number of issues need to be addressed to control epidemic spread of HIV infection in Kazakhstan. They are: a firm and responsible political attitude of high-level authorities, coordination of legislation, improvement of data collection and use of critical information, further enhancement of HIV dissemination prevention, creation of a comprehensive system of quality health care support, strengthening cooperation and partnership and research development.

**Tuberculosis:** According to the formal WHO data for 2005, the Republic of Kazakhstan is leading in terms of TB incidence (TB) – 147 per 100,000 people, and is among 18 priority countries in terms of tuberculosis for the WHO European region. Besides that, prevalence of Multi-Drug Resistant Tuberculosis (MDR TB) is one of the highest in the world. As of today, a number of problems exists which hinder stabilization and improvement of the epidemiological situation with regard to tuberculosis in Kazakhstan. They are: high rate of tuberculosis with multi-drug resistance, improper epidemiological surveillance and registration of consumptive, deficit of qualified staff in TB service, lack of action plan aimed at improving TB-related epidemiological situation, reducing prevalence and mortality caused by TB, lack of infectious control in the laboratories and hospitals (conditions in laboratories performing culturing and TDS are not safe for the personnel and as a consequence results of their tests are not reliable), inadequate integration with the system of HIV/AIDS control and inadequate sanitary knowledge of the population related to tuberculosis due to its stigmatization. Regardless of the complex epidemiological situation there is the possibility to achieve the target provided that the aforementioned problems hindering stabilization and improvement of tuberculosis-related epidemiologic situations are eliminated.

## Goal 7: Ensure environmental sustainability

**Country policies:** Since the time the Second MDG Report 2005 was published, the Republic has achieved certain success in the implementation of declared commitments on transition to sustainable development. However, the lack of ecosystem-based approach to implementation of the national strategies of environment management remains a major problem for Kazakhstan with regard to achievement of environmental sustainability. It is important to address problems on restoration of SPA, forests, on reduction of greenhouse gas emissions, and the introduction of energy efficient technologies taking into account all the related economic, ecological and social aspects.

**Access to water:** In terms of water supply Kazakhstan takes the last place among CIS countries. Runoffs of the majority of large rivers form beyond the Republic, which results in its dependence on neighbouring countries. Achievement of Target 10 seems to be problematic given a number of challenges, the most important of which is technical inadequacy of water supply and water drain systems. It is necessary to ensure a complex approach that would take into account interests of water users and the issue of its rational use according to evidence-based global norms and advanced systems of control over water consumption.

Technical sector upgrading, introduction of state-of-the-art technologies of drinking water treatment and supply as well as water drain and treatment of runoffs should be given priority significance. Issues of rational use and protection of water resources from pollution and depletion are topical too. Besides measures on updating environmental legislation, regulation, recording and control of water consumption, it is necessary to develop education and to contribute to the organisation of environmental actions targeted at upbringing civil liability for conservation of vital natural resources.

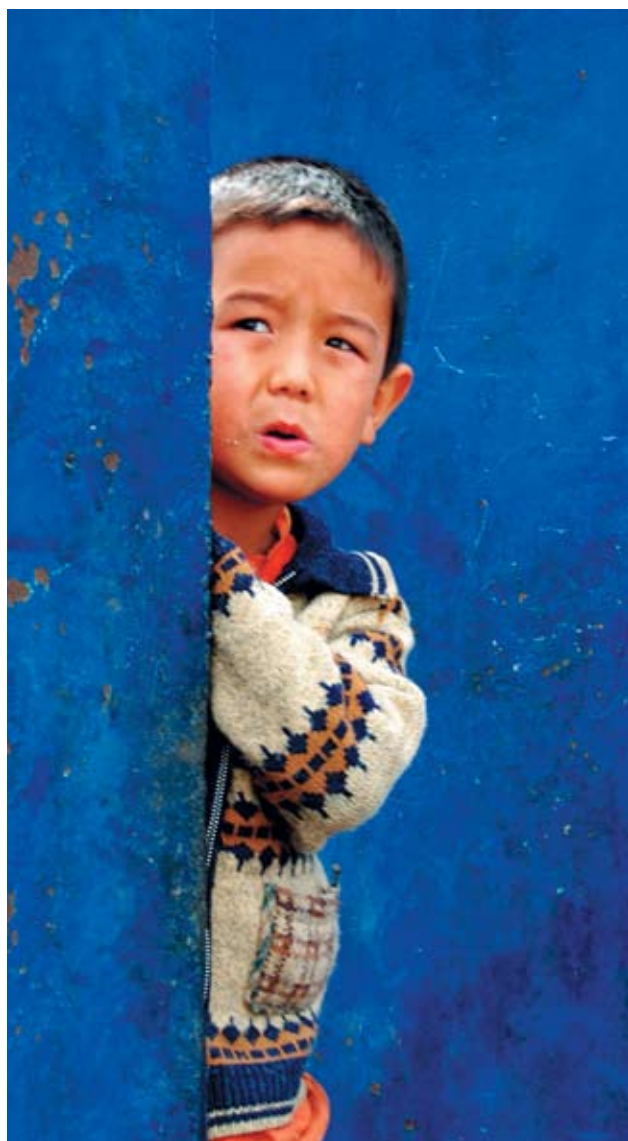
**Access to tenure and sanitation:** The target to increase the proportion of households with access to tenure and proportion of the population having access to improved sanitation systems is closely linked with the problem of

improvement of living conditions of the poor population. Experts note considerable growth of housing poverty in Kazakhstan (more and more people cannot afford housing) with an insignificant reduction of consumer poverty. Illegal housing construction and the formation of slums in the suburbs of big cities has increased. When addressing this problem all aspects of poverty elimination, ensuring access to primary education, health services and employment should be taken into account.

Complex and balanced measures should be undertaken to settle down issues of illegal housing construction. In gender terms, unfortunate housing situations directly influence the social and economic position of women, their opportunities to get employment, to raise healthy children and to remain full-fledged members of society. Labour and migration policies have to be aimed not only at the creation of additional work places but at ensuring proper work conditions for workers and their families.

**Today it is possible to declare with full responsibility: Kazakhstan has successfully finished a transitional stage and confidently entered a new qualitative stage of its development. At the same time this new stage of development defines new priorities, dictated both by the logic of development of Kazakhstan and by a wider global context. These priorities, being in line with the MDG ideology, may lay the foundation for the formulation of more ambitious development goals and targets for Kazakhstan. Resolution of these problems will allow Kazakhstan to keep leading positions on the post-Soviet domain and in Central Asia, and to become one of the most competitive and dynamically developing states in the world.**

# MDG 1. ERADICATE EXTREME POVERTY AND HUNGER



## Target 1. Halve the proportion of people whose income is below subsistence minimum

In 2000 Kazakhstan, among other 189 nations of the world, signed the Millennium Declaration and assumed obligations to achieve Millennium Development Goals by 2015. At the time combating poverty was a priority in terms of national policy, and the Government of the Republic of Kazakhstan adopted several programmes on poverty alleviation. Thus the achievement of MDG 1 was recognized as a complex undertaking that would determine the sustainable development of the country. All actors in the society showed readiness to adopt necessary programmes and monitor their implementation, including the preparation of MDG reports in 2002 and 2005. The discussion and adaptation of MDGs on poverty issues at national and local levels benefited from this favourable environment. During the preparation of the MDG report for 2005 it was concluded that Kazakhstan has achieved the goal and both targets related to poverty eradication.

Progress in achieving this target is assessed based on the following indicators:

- ◆ Proportion of population with income size below the subsistence minimum
- ◆ Poverty gap ratio (incidence and depth of poverty)
- ◆ Share of poorest quintile in national consumption

The main task of the authors in the current report was to review Kazakhstan's development trends and determine to what extent Goal 1 is relevant given the changing economic and political conditions. With that aim in mind, the correlations between the current situation and the strategic development priorities of the country need to be examined in the context of the Millennium Development Goals.

## Poverty Level in Kazakhstan in 2007

Target 1 has been adapted to the national situation in the following way – “Halve the proportion of people whose income is below subsistence minimum.” The baseline for the target monitoring is the 1996 data, given the survey of consumer-price indices that was implemented by the Agency for Statistics of the Republic of Kazakhstan with World Bank support. The survey data provided a quantitative estimate of the poverty level in Kazakhstan for the first time after independence; 34.6%.

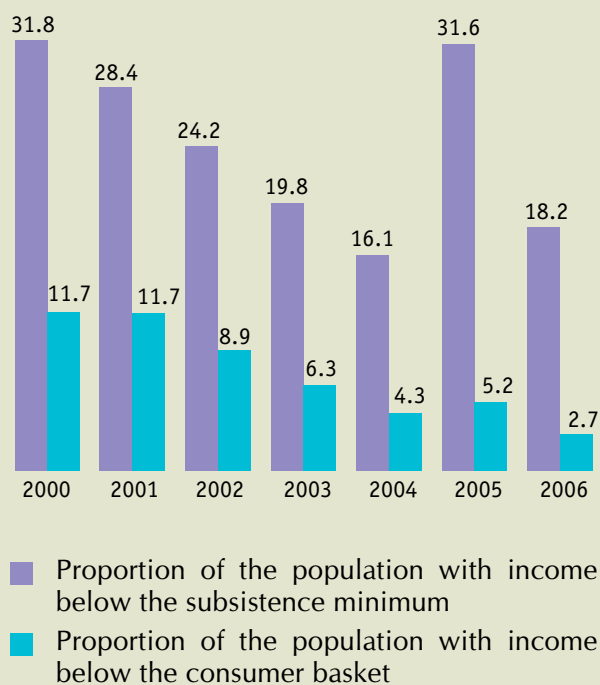
According to the 2005 national MDG progress report, Kazakhstan achieved Target 1 of the MDG 1. The level of income poverty was reduced by more than 50%. Still, notwithstanding this considerable progress, there is quite a large number of people in the country that can be considered poor; there is also a certain layer of poorest people that live near the poverty level with an income too low to ensure a decent life (more than the size of one, but less than the size of two subsistence minimums).

In 2006 a new composition of the subsistence minimum was approved with revised shares of goods and services included into the consumer basket<sup>2</sup>. The changes involve an increased list of food items and increased costs for the minimum necessary non-food goods and services. As a result in 2006 the subsistence minimum cost in the country has increased by 39.8% in comparison with 2005.

In 2005 when the subsistence minimum constituted 6014 tenge the proportion of poor people in the country made up 9.8%. In 2006 when the new methodology for calculation of the subsistence minimum was introduced the latter made up 7618 tenge for 2005. According to the new methodology the poverty rate in the country increased to 31.6% in 2005 and decreased to 18.2% in 2006. Such a dramatic growth in numbers of people whose income turned out to be below the increased subsist-

**Graph 1.1.**

The proportion of the population with the income (for consumption) below the size of subsistence minimum and the consumer basket cost\*, %



\* Data for 2005 and 2006 has been calculated based on the new methodology introduced on January 1, 2006

Source: The Agency for Statistics of the Republic of Kazakhstan.

ence minimum can be explained to a certain degree by the fact that a considerable part of the population had incomes close to the subsistence minimum, slightly exceeding it, and with its increase they have fallen into the category of the poor.

<sup>2</sup> Based on the common Order, endorsed by the Ministry of Labor and Social Protection of the Population of the Republic of Kazakhstan of 02.12.2005, № 307/1-п and the Agency for Statistics of the Republic of Kazakhstan of 05.12.2005, № 194 «On Endorsement of the Rules of Subsistence Minimum Estimation», since January 1, 2006 a new consumer basket has been endorsed which consists of 43 items of food products. The composition of the food basket is corrected given seasonality and its share makes up 60% of the cost of subsistence minimum. In 2006 a sampling of households was done on rotation basis – 3,000 households per a quarter. The data was analyzed based on the scale of equivalence of income depending on the size of the family with a single factor 0.8 for the second and the next family members.



However, in 2006 the progress in poverty reduction was significant: the proportion of the population with income below the subsistence minimum decreased 1.7 times (31.6 against 18.2) compared to 2005, and the number of people with income below the cost of the food basket reduced by half. The proportion of the population with an income below the cost of a new food basket was reduced compared to 2004, which can also be viewed as progress by the government in reducing poverty, more specifically food poverty.

The sustainable reduction in the number of poor (judged against the subsistence minimum) until 2005 was accompanied by a decrease of the poverty depth and acuteness indices. These indices indicate how poor a person is and the degree of inequality among poor people. The use of a new structure of the subsistence minimum to assess the poverty level increased the data for these indices three times in 2005 compared to 2004. In 2006 the poverty depth and acuteness reduced almost twofold compared to 2005.

**Table 1.1.** Poverty prevalence in the Republic of Kazakhstan, 1999-2006

	1999	2000	2001	2002	2003	2004	2005	2006
Proportion of the population with the income below the subsistence minimum	34.5	31.8	28.4	24.2	19.8	16.1	31.6*	18.2
Proportion of people with the income below the cost of the food basket	14.5	11.7	11.7	8.9	6.3	4.3	5.2*	2.7
Poverty depth	13.7	10.3	7.8	6.1	4.6	3.3	7.5*	3.9
Poverty acuteness	5.5	4.0	3.1	2.2	1.6	1.0	2.5*	1.3

\* Data for 2005 and 2006 has been calculated based on the new methodology introduced on January 1, 2006

Source: The Agency for Statistics of the Republic of Kazakhstan.

The processes of society stratification by income level and the degree of social-economic inequality are determined using the differentiation coefficients that characterise the ratio of the most secure and the least secure population groups: the ratio of funds and the ratio of income concentration (Gini coefficient). In

Kazakhstan the Gini index is between 0.3-0.4, which speaks to obvious inequality of income distribution in different population groups. In 2003 and 2004 the inequality was moderate (within the limits of 0.2-0.3). A value of 0.4 and beyond of the index speaks about significant inequality in the society.

**Table 1.2.** Economic inequality in Kazakhstan in 1998-2006

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ratio of funds	11.3	9.4	8.3	8.8	8.1	7.4	6.8	6.75	7.38
Gini index (by 10% value population groups)	0.347	0.332	0.307	0.322	0.312	0.300	0.291	0.304	0.312

Source: The Agency for Statistics of the Republic of Kazakhstan.

The gap between the income of the poorest and the richest population groups is significant. In Kazakhstan 3% of the wealthiest people have the same share as 20% of poor people, i.e., 10% of the total return. Almost a quarter of all household revenues belong to the wealthiest citizens while 10% of the poor population possesses only 4% of all household revenues.

The structure of consumers' expenditures and in particular the proportion of food consumption within the total population expenditures is considered as one poverty indicator. Households that spend more than 50% of consumer expenditures for food products are considered to be in the poor category. In 2005 expenditures for food constituted 44.6%, and in

2006 – 41.7% of total consumer expenditures. At the same time, expenditures for non-food products have increased considerably (in 2005 their share constituted 29.4% and in 2006 – 32.2%)<sup>3</sup>.

The above data lead to the conclusion that in Kazakhstan the achievement of the MDG 1 was due to the decrease of income poverty or extreme poverty. At the same time, given the objective of entering the 50 most competitive economies of the world, and the objectives of the long-term strategy until 2030, Kazakhstan should pay attention to poverty related to lack of opportunities since the implementation of the country development plans depends entirely on the achievement of capacity-development objectives.

## Regional Differences in Poverty in Kazakhstan. Urban and Rural Poverty

Poverty is to a great extent a problem of rural areas, which is a sign of non-uniform economic development of the country and the concentration of industrial companies in urban areas. The existing large differences in population incomes among regions lead to the conclusion that a number of regions will keep relatively high poverty levels in the upcoming several years. Besides that, there is considerable differentiation in incomes and access to services between some population categories, which defines the most vulnerable groups in the highest risk of becoming poor<sup>4</sup>.

Differences in the development of various sectors of the economy had an impact on development of different oblasts, and shaped the poverty picture in the oblasts depending upon the profile of production.

Like in the previous years, the lowest poverty level in 2006 was in the cities of Astana and Almaty, where the share of population with incomes below the subsistence minimum was 5.5% and 12.1% respectively.

The highest poverty level was registered in Kyzylorda oblast – 37.5%. A high poverty rate is still to be found in Mangistau (26.5%),

Akmola (25.4%), Atyrau and Zhambyl oblasts (23.6%). In Atyrau and Mangistau oblasts a high poverty level and depth as well as a high Gini index coexist with the highest level of the average salary. This situation is a sign that the population does not have adequate access to the production process and as a result to income distribution, and is also a sign of an underdeveloped social protection system.

Considerable differences in life standards in different oblasts of Kazakhstan determine significant interregional differences in poverty distribution and differences depending on the place of residence – in urban or rural areas.

Traditionally in Kazakhstan rural poverty is greater than urban poverty. However, in recent years this gap is decreasing. In 2005 rural poverty was 2.2 times higher than urban poverty<sup>5</sup>; and in 2006 rural poverty exceeded urban by 1.8 times (24.4% against 13.6%). Such «smoothing» of the rates of rural and urban poverty is to a great extent determined by the active migration of the population from rural to urban areas. In turn, migration flowing from villages to cities results in growth of the rate of urban poverty.

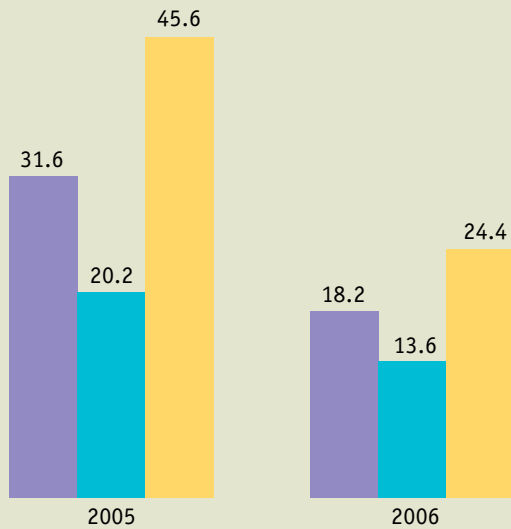
<sup>3</sup> Income and expenditures of the population. The Agency for Statistics of the Republic of Kazakhstan. 2006.

<sup>4</sup> Development Goals at the Turn of the Millennium in Kazakhstan. 2005.

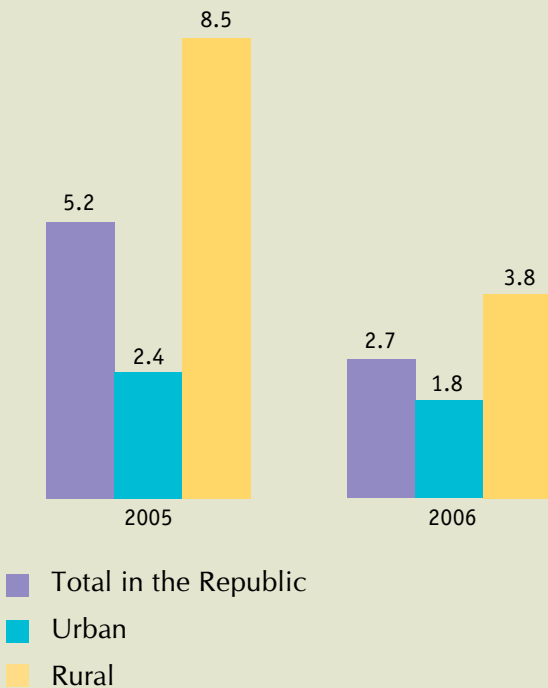
<sup>5</sup> Development Goals at the Turn of the Millennium in Kazakhstan. 2005.

**Graph 1.2.**

Proportion of the population with the income (for consumption) below subsistence minimum, %



Proportion of the population with the income (for consumption) below consumption basket, %



Source: The Agency for Statistics of the Republic of Kazakhstan.

As it has already been mentioned, rural poverty in all the oblasts of the republic is higher compared to urban poverty, and the highest difference – more than five-fold – is registered in Aktobe and Kostanai oblasts, and more than three-fold in Mangistau, Atyrau, Pavlodar and North-Kazakhstan oblasts. The highest poverty level is registered in both urban and rural areas in the Kyzylorda oblast – 37.2% and 38.2%, respectively. In Akmola, Zhambyl and Almaty oblasts urban and rural poverty rates are higher than 20%.

A lower poverty level in urban areas compared to rural ones is determined by considerable opportunities in formal and informal employment as well as by the fact that the level of education of urban citizens is higher compared to the rural population. This allows city-dwellers better opportunities for decent jobs with higher incomes. The employment opportunities in the village are quite limited, especially for young people. Until now, the state has been the major employer, offering jobs predominantly in the social sphere. However, inequality of incomes in urban households is more obvious than in rural ones.

Families in rural areas tend to be larger with more dependants, and this is also a factor contributing to rural poverty. Problems of rural poverty and development are determined by a number of factors, including remoteness from oblast and rayon centres and inadequate integration of the local economy into the national and regional economic and social development programmes. Regardless of their place of residence, the poor population includes children, unemployed, pensioners and working people with low salaries.

Migration and demographic factors also influence the poverty level. The processes of emigration and internal migration influence the life standards of migrants, especially oralmans (repatriates).

## Poverty and employment

The opportunity to work productively with stable employment is a major factor contributing to economic growth and creating the conditions for human development and poverty reduction. An effectively functioning labour market, while ensuring employment and fair income to the working population, makes it possible for the government to focus on the support and protection of socially vulnerable and disabled groups, and in this way to ensure equal rights and opportunities for human development for all.

The employment level of the population in the country is growing: from 91.6% – in 2004 to 92.2% – in 2006, and the unemployment rate is going down: from 8.4% in 2004 to 7.8% in 2006. The reduction of youth (defined as people aged from 15 to 24) unemployment rate is another positive trend: from 14.3% in 2004 to 12.1% in 2006<sup>6</sup>, although its size remains considerable. Among those unemployed every second person is a woman, and every third is a man of young or middle age (15-39 years)<sup>7</sup>.

Self-employed citizens form a distinct category of the poor and vulnerable population; its share in the structure of the economically active population in recent years made up about 38% of the total employed population, down to 35.5% in 2006, but still remaining considerable.

The low productivity of such a form of economic activity generates low income and increases the risk of poverty among self-employed population in the non-formal sector, as these people usually find themselves outside pension and social funds (both as users and investors). They are not covered by legal regulation and protection of workers. Rural people are the majority in this group and their main source of income is their land plot and household livestock breeding, which deprives them of targeted social assistance and makes most vulnerable to the risk of poverty. Only 5% of those self-employed were beneficiaries of targeted social assistance in 2006. This makes the poverty risk higher for large families, especially those residing in the rural areas, and for labour migrants, including those working illegally in the country.

**Graph 1.3.**

Employment data in Kazakhstan, %



Source: The Agency for Statistics of the Republic of Kazakhstan.

<sup>6</sup> Republic of Kazakhstan: 2007 Abridged Statistical Yearbook. The Agency for Statistics of the Republic of Kazakhstan, Astana, 2007.

<sup>7</sup> Programme of Further Deepening of Social Reforms in the Republic of Kazakhstan for 2005-2007. Endorsed by the Decree of the Government of the Republic of Kazakhstan of November 30, 2004, № 1241.

## Gender aspects of poverty

Women are more exposed to the risk of poverty, as, first of all, their share in the country population is larger and secondly, they are subject to social and economic inequality more often.

Considerable differences remain in the labour remuneration from a gender point of view. In 2006 the average men's salary was 49,737 tenge, compared to 30,984 tenge for women; the ratio is 62.3% and has increased by 4% since 2004. The unequal pay level is expressed by the fact that in each type of economic activity men's pay is higher by 1.3-1.7 times compared to that of women's. Even in sectors with a high share of female employment (health care, education and public administration), male labour is paid 18-28% higher than women's.

Women's business activity level is lower by 10% compared to men's. Hence, a larger proportion of women are unemployed. The share of women in long-term unemployment is two-fold higher than that of men in the same category. If we consider youth unemployment, young girls and young women prevail over men as well.

At the same time self-employment is more specific for women – in 2004 self-employed women accounted for 42.3% while men in the given employment status made up 36.8%. In rural areas the number of self-employed people is twice as high as in urban locations: in rural areas there are 59.2% women and 51.5% men, and in the urban locales 25.3% women and 22.8% men. Women are self-employed mainly in such sectors as trading at commodity and food markets, catering, household services, agricultural products processing, etc.

Limited access of women to financial resources necessary for business allows them to engage predominantly in small business, mostly in the informal economy sector, that do not yield considerable income. The limited access of women to capital, financial resources and informa-

tion has determined to a considerable degree the infringement of the rights of rural women – only 10% of farms are headed by women that own only 2.9% of agricultural lands; the qualitative characteristics of these lands (fertility, volumes and location) are low due to the limits of loans and credits available to women. The fact that women lack liquidity for mortgages complicates the access to loans for farming and, consequently, makes their business activity less effective than that of the men.

Economic possibilities of men and women are to a great extent determined by gender professional segregation. Horizontal professional segregation characterizes uneven distribution of men and women by economy sectors and by professions. The majority of women employees are concentrated in areas with low wages – education, health care, social services, hotels and restaurants. The proportion of women in these spheres make up between 70% and 80%. For comparison: the majority of working men – from 60% to 80% – are concentrated in the sector of public administration, construction, industry, in the public arena, the power industry, in operation with real estate, i.e., in areas in which the level of investments is high, including foreign investments.

Vertical segregation means uneven distribution of women and men by administrative hierarchy. In Kazakhstan it is manifested in the fact that men occupy 86%<sup>8</sup> of senior management and deputy positions in local state structures. Women basically hold positions of middle management. The process of employment feminization (i.e., increase of the number of women-managers in the economic sector) is accompanied by pushing women out to low-paid and unstable economy segments. They integrate and are marginalized simultaneously, and are a potential challenge for the country's sustainable development.

<sup>8</sup> Based on data of the Agency for Statistics of the Republic of Kazakhstan. 2006.

## CONCLUSION

The nationally-adapted Target 1 of Goal 1 was achieved in Kazakhstan already in 2004. Notwithstanding some progress in reduction of income poverty, however, there is a certain risk for quite a considerable proportion of the population living near the poverty line to fall into poverty given that the income of these people is too low to ensure a decent living standard. The size of the subsistence minimum, used for the measurement of the poverty level, does not exactly reflect real food consumption by the population and is not adequate enough to meet basic needs of the population and to ensure an adequate living standard.

National policy regarding poverty reduction in Kazakhstan has to be targeted not only at those who are already absolutely poor but also has to contribute to preventing the risk of impoverishment of other low-paid population categories. To determine the size of the population at risk of becoming absolutely poor it is more sensible to use a threshold income value equal to the size of two subsistence minimums. The vulnerability of the population with average per capita income below this level (a share of almost 40%), is aggravated by insecure employment, low and unstable income, and limited access to housing, safe water and sanitary-hygienic conditions as well as to social services.

The definition of the optimal size of the minimum wage based on 2 subsistence minima will allow increasing the incomes of working people and the attractiveness of productive employment. A well-designed national social policy aimed at protection of vulnerable population groups is an important component of the poverty reduction strategy. Special attention should be given to improving the system of protection of the most vulnerable social groups: large and one-parent families, especially residing in the rural area, single aged people, and people with disabilities, migrants and oralmans.

Kazakhstan is recognized as a country with a stable and continuously developing economy. Macroeconomic stability of the country has been achieved through reforms in social, monetary and credit policy, land relations, and private sector development. The progressive objectives of the Republic in achieving the status of a competitive economy have to be accompanied by a commensurate revision of poverty assessment criteria. Thus, besides defining subsistence minimum at a level equal to its double current value, it is reasonable to define the poverty line (as a criterion for provision of targeted social assistance) at the level of total cost of the current consumer basket as is the case in the countries with sustainable developing economies.

## Target 2.

### Halve between 1990-2015 the proportion of people who suffer from hunger

#### Introduction

Target 2 calling to halve the proportion of people suffering from hunger within the framework of MDG 1 «Eradication of Extreme Poverty and Hunger» has already been achieved in Kazakhstan. For Kazakhstan the problem of hunger is no longer urgent. It is suggested that Target 2 be adapted due to the national situation to reflect a target reduction by half of the proportion of the population that does not have access to balanced nutrition.

Progress in achieving this target is assessed based on the following indicators:

- ♦ Nutrition status of children under 5 (weight to age, height to age and weight to height ratios).
- ♦ Prevalence of micronutrient deficiency among the population, which is also termed as «hidden hunger»: prevalence of vitamin A deficiency, iron deficiency, iodine deficiency and folic acid deficiency, etc.

#### Nutrition status of children under 5

The nutrition status of a child reflects his or her overall health. When children have access to an adequate food supply, are not exposed to repeated illnesses, and are well cared for, they reach their growth potential and are considered well nourished.

Weight-for-age is a measure both of acute and chronic malnutrition. Children whose weight-for-age is more than two standard deviations below the median of the reference population are considered moderately or severely underweight. Height-for-age is a measure of linear height of children. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as moderately or severely stunted. Stunting is a reflection of chronic malnutrition as a result of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

Finally, children whose weight-for-height is more than two standard deviations below the median of the reference population are classified as moderately or severely wasted. Wasting is usually the result of recent nutritional deficiency. This indicator may exhibit lack of foodstuffs in the population or may be

related to high prevalence of illnesses among children of the particular age group (for example, diarrhea, AIDS, etc.). Increase of this indicator by five percent requires measures be taken as growth of infant mortality could follow.

In Kazakhstan 4 percent of children under five are moderately underweight (weight for age) and 0.8 percent are classified as severely underweight, at that, 3.8 percent of children are wasted (weight for height) and 1 percent – severely wasted. At the same time, 12.8 percent of children are stunted for their age and 4 percent are too short.

Children in the West Kazakhstan (8.8 percent) and Almaty Oblast (8.1 percent) are more likely to be underweight for their age than other children; as for height-for-age – Aktobe Oblast (23.5 percent), Kyzylorda Oblast (23.3 percent) and Almaty Oblast (22.1 percent). The highest proportion of moderately stunted children for their age was found in West Kazakhstan (12.5 percent) and Mangistau Oblast (9.3 percent). Those children whose mothers have higher levels of education are the least likely to be underweight and stunted compared to children of mothers with primary/incomplete secondary education.

## Fighting hidden hunger

Deficiency of such vital vitamins and minerals as iron, iodine, folic acid and vitamin A in a diet is referred to as «hidden hunger», which has an impact on morbidity and mortality of mothers and children.

According to the data of the surveys implemented, 45.7 percent of reproductive age women in Kazakhstan (MICS, 2006) and 36 percent of children at the age of 6-59 months suffer from iron-deficiency anaemia (DHS, 1999). Vitamin A deficiency prevalence among children of this age group makes up 57.2 percent (MICS, 2006).

Iron-deficiency anaemia in reproductive age women is the reason why about 40 percent of children in Kazakhstan suffer from reduced brain development as well as a decrease of intellectual capacity and physical growth and development. In addition 1,000 Kazakhstani children are exposed annually to the risk of death during pregnancy or immediately after birth.

Vitamin A deficiency causes a depressed immune status in approximately 20 percent of children. As a result, infectious diseases in these children take the most severe forms and annually are the cause of mortality for about 1,000 babies.

Annually 350 cases of nerve tube congenital abnormalities, including infantile paralysis, are registered in Kazakhstan. This is caused by the folic acid deficiency in a diet of pregnant women.

The most effective and sustainable way to eliminate deficiency of the aforementioned vitamins and minerals is fortification (enrich-

ment) of day-to-day foodstuff (iron and folic acid-based fortification of flour /bread and salt iodization).

In Kazakhstan the issue of iodine deficiency is being successfully resolved through salt iodization – since 1999 to 2006 the level of good quality iodized salt consumption has increased from 29 percent (DHS, 1999) to 92 percent (MICS, 2006). Because of this, the level of iodine excretion in urine among women of reproductive age has increased from 93mcg/ml to 230mcg/ml, which meets WHO standards. Currently Kazakhstan is in the process of preparation for certification as a country that has achieved Universal Salt Iodization.

Flour fortification with iron and folic acid would considerably reduce the prevalence of iron deficiency, anaemia, and folic acid deficiency, increase the quality of life, and considerably contribute to a decrease in maternal and child mortality. Recognizing the importance of this issue, the Government started drafting a law on iron deficiency anaemia control. Much attention in this law will be given to the issue of fortification of premium and 1st grade wheat flour with iron and folic acid.

The Vitamin A supplementation programme aimed at children aged 6-59 months may help to tackle its deficit; to that end it is necessary to include Vitamin A capsules into the basic benefit package for children under 5, which will save lives and improve the health of future generations of the people of Kazakhstan.

## CONCLUSION

To achieve the target of reducing by half the proportion of the population that does not have access to balanced nutrition and to ensure the quality of life of the Kazakhstani population through increasing the potential for intellectual development and physical growth of children the following recommendations are made:

1. To ensure improved monitoring of quality salt iodization;
2. To ensure the adaptation of a Law on Anaemia Deficiency Control through the introduction of mandatory fortification of premium and first grade wheat flour;
3. To ensure registration of Vitamin A capsules in forms of 100,000 ME for children aged 6 months to 1 year and 200,000 ME for children of 1 year of age and older;
4. To introduce a Vitamin A supplementation programme and include the above registered forms of Vitamin A into the Basic Benefit Package for children under 5.



# MDG 2. ACHIEVE UNIVERSAL PRIMARY EDUCATION



**Target 3.**  
Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

## National context

The Republic of Kazakhstan shares the opinion that accessible good quality education determines economic and social stability, helps to develop human potential, and enhances country competitiveness. A new focus on educational development was formulated in the Address of N. Nazarbayev, the President of the RK, of 28.02.2007 entitled «New Kazakhstan in a New World». According to the address with Kazakhstan aiming to be among the fifty most competitive countries of the world «education sector reform is one of the most important instruments enabling the country to achieve real competitiveness». Currently Kazakhstan takes 56th place in the global index of competitiveness and is still a leading nation among CIS countries (Global Report on Competitiveness, 2006).

Due to the country's strengthening economy the Government is making an effort to increase the volume of financing for the sector of education: «A twofold growth of expenditures for education is stipulated by the republican budget for 2007 compared to 2005»<sup>9</sup>.

Education (as well as its subjects – teachers and students) is maintained at the regulatory legislative level: in 2007 the Law on Education of 1999 was updated, the State Programme of Education Development for 2005-2010 is being actively implemented, the Concept of Continuous Pedagogic Education has been endorsed, as well as the Law on the Rights of the Child, the Law on Child Neglect and Homeless Children, etc.

According to the Constitution and the Law on Education the state policy is targeted at ensuring access/equality and quality/efficiency of free manda-

<sup>9</sup> NCEQA. 2007. National Report. Astana. P. 6.

tory general secondary education, which includes primary (1-4 grades), secondary basic (5-9(10) grades) and general secondary education (10(11)-11(12) grades)<sup>10</sup>. Thus, Goal 2+ for Kazakhstan should be viewed as ensuring general secondary education for the people in the country.

The following scale factors could be listed among those that hinder effective implementation of the national educational policy as fixed in the strategic country development documents including EFA and MDG: poverty and unemployment of a certain part of the population, especially in the rural areas; presence of vulnerable population groups<sup>11</sup>; vast territory with low population density; and the reduction of the school network in rural areas. As a result, there are problems with school attendance and maintenance of school enrolment, and the emergence of groups of at-risk children prove the fact that not all children have access to education.

Education quality deterioration is also a problem, and one of the indicators of this at the national level is Unified National Test (UNT). Annual UNT results reveal lower learning achievements of rural school students compared to urban ones, which is the manifestation of the quality gap in education of different population groups<sup>12</sup>.

Enrolment rates in primary, basic and secondary general education in the Republic in 2006 made up 99.5%, 99.8%, and 99.2% respectively<sup>13</sup>. Enrolment rate in secondary education of 7-17-year old citizens of the country in 2006/2007 made up 96% and in 2004/2005- 97%<sup>14</sup>.

National priorities within the framework of education strategy implementation are the following:

- ♦ Introduction of 12-year education with simultaneous introduction of new state standards for curricula, textbooks and learning materials;
- ♦ Specialization of the senior school level (11-12 grades);
- ♦ Development and implementation of competence-based (life skills oriented) education;

- ♦ Development of primary and secondary vocational education;
- ♦ Introduction of multi-level structure of higher education (bachelor's degree courses – baccalaureate), master's degree courses, doctor's degree courses);
- ♦ Widening the use of the Kazakh language and increase of the network of schools with national language at the same time maintaining rights to education for different ethnic groups;
- ♦ Improvement of the quality of education and enhancement of its monitoring mechanisms via UNT and intermediate monitoring of learning achievements passing from primary level to basic (from grade 4 to 5) and from basic to upper secondary education level (from grade 10 to 11);
- ♦ International cooperation development.

The EFA and MDG goals are important within the context of the Kazakhstan national policy implementation in general (educational, social-economic, linguistic, cultural and etc.) and they are reflected in decisions made at the national and regional levels.

Progress in achieving this target is assessed based on the following indicators:

- ♦ Net enrolment ratio in primary school
- ♦ Survival rate to grade 5
- ♦ Literacy rate of 15-to 24-year-olds

MDG review for 2005 states that «international MDG 2 in its original version is already achieved in Kazakhstan and it is not a topical issue for the country anymore». Though Goal 2 is considered to be achieved according to MDG indicators, its assessment on a wider MDG 2 basis indicates unresolved problems in this area»; currently problematic are issues of school attendance, quality of education, rural school problems, and issues of education for children from vulnerable population groups<sup>15</sup>.

<sup>10</sup> The Law of the RK on Education. Chapters 2-4

<sup>11</sup> NCEQA. 2007. National report. Astana. P. 42.

<sup>12</sup> Statistics of UNT (MoE) and NCEQA. 2007. National report. Astana. P. 28.

<sup>13</sup> NCEQA. 2007. National report. Astana. P. 42.

<sup>14</sup> The Agency for Statistics of the Republic of Kazakhstan. 2006. Life Standard of the Population in Kazakhstan. P. 25.

<sup>15</sup> Ministry of Foreign Affairs/ UN Office in Kazakhstan. 2005. Development Goals at the Turn of Millennium in Kazakhstan. P. 16, 21.

## ACCESS AND EQUALITY

According to the Constitution of the RK and the Law on Education, access to mandatory free education at all the levels is analyzed through the definition of:

- a) population of adequate age group;
- b) availability of schools and availability of places in them;
- c) real education enrolment rate.

Equality is ensured by actual access to education of all strata of the child population, regardless of sex, social origin and status, ethnicity and religion, language, place of residence, and physical and mental development.

### Access to pre-school programmes

Given the importance of pre-school education as the first stage of lifelong learning (LLL) work is going on in the Republic on expanding the network of pre-school organisations (PO) and the provision of pre-school services. Enrolment of 5-6-year old children with pre – primary education is rather high compared to the enrolment of 1-6-year-olds in pre-schools that ensure early development programmes within the system of day-time kindergartens. In 2005 there was a dramatic shortage of pre-school organisations – only 23.3% children<sup>16</sup> were enrolled in pre-school education, in 2006 some growth of pre-school organisations was registered, however only 27.6% of children<sup>17</sup> were able to attend kindergartens. At the same time general access to compulsory pre-primary education during these years has considerably increased due to the growth of pre-primary groups and classes in schools: 64% in 2004, 67.6% in 2005<sup>17</sup> and 78% in 2006<sup>19</sup>.

There are more boys enrolled in all kindergartens than girls, (17.8% and 14.1% respectively)<sup>20</sup>. The largest number of children that

get preschool education are registered in Astana city (47%), Karaganda oblast (33.4%), in Almaty city (29.7%) and in Pavlodar oblast (26.8%). Much fewer children are enrolled in pre-school organisations in Akmola (8.8%), Kyzylorda (8.2%), South-Kazakhstan (8.1%) and Almaty (7.1%) oblasts<sup>21</sup>. Regardless of the measures taken to increase the number of pre-school organisations and other forms of pre-school education, the problem of access to pre-school education (more than 130 thousand children are on the waiting list for kindergartens) is still pertinent.

Enrolment rate of urban children in pre-school organisations considerably exceeds the enrolment rate in rural areas (73.3% in urban areas, 61.5% in rural areas in 2005). Besides that there is a certain differentiation with regard to enrolment rate in pre-school education by oblasts, determined by the degree of urbanization and well-being level in oblasts<sup>22</sup>. Unfortunately, fees for kindergarten limit access to them for children from the low-income families, deepening social inequality.

<sup>16</sup> The Agency for Statistics of the Republic of Kazakhstan. 2006. Life Standard of the Population in Kazakhstan. P. 25.

<sup>17</sup> NCEQA. 2007. National Report. Astana. P. 42.

<sup>18</sup> The Agency for Statistics of the Republic of Kazakhstan. 2006. Life standard of the population in Kazakhstan. P. 25.

<sup>19</sup> Presentation of the Minister of Education at the 1st forum on child protection. December 7, 2006. Astana

<sup>20</sup> UNICEF. 2007. Draft MICS Report. P. 17.

<sup>21</sup> UNICEF. 2007. Draft MICS Report. P. 17.

<sup>22</sup> NCEQA. 2007. National report. Astana. P. 9.

## Access to general secondary education

There are 8,055 day-time general secondary schools functioning in Kazakhstan, out of which 2,106 schools are located in urban areas, with enrolment of 1,447,980 students, and 5,949 schools are located in rural areas with enrolment of 1,267,942 school children. 98.4% of schools are public ones (as of September 1, 2006). General enrolment in secondary schools is 2,715,922; there are schools with Kazakh, Russian, Uzbek, Uigur, German, Tajik, and Ukrainian languages of instruction. Enrolment of children at national schools with the state language of instructions increased by 4.9%<sup>23</sup> from 2001 to 2006.

Demographic and migration processes have led to a decrease in school enrolment and this situation has resulted in an increase in the number

of small sized schools. Small schools are supported by the government to provide and ensure the rights of children from small settlements to secondary education (55% out of total number of secondary schools are small sized schools). Based on the available data for 2006, there was lack of schools in 997 settlements, where 23,206 school-age children were registered but had no access to education. Nevertheless, when comparing similar data from 2006 to data from 2005, one can see a small degree of progress. In 2005 there were 1,003 settlements without schools, with 27,799 school age children. On the whole, in the country only 23% of children (out of the total number of those who are in need) are provided with transportation to schools<sup>24</sup>.

## Access for children with special needs

The number of children identified with special education needs has increased (120,665 children in 2004; 131,465 children in 2006). Neither the number of special schools nor enrolment in them increased. Thus, in 2004 only 25.3% of children with special needs had access to education; in 2006 there were 23.3% children who had access to education in 100 special organisations/schools.

Basically, children with special needs in urban areas have more access to education. For children with special needs from rural and remote areas access to education services is practically not available.

From 2004 to 2006 219 specialized classes for

6,883 children were opened in some secondary schools<sup>25</sup>. Such classes and play-groups initially appeared in Semipalatinsk, Kyzylorda, Shymkent and Petropavlovsk.

On the whole ideas of inclusive education have received more and more support within the society due to the activities and new methodologies promoted by the National Centre of Inclusive Pedagogy, local NGOs, and international organisations. A network of psychological, medical and pedagogic services for children, social and legal support, consultations, cabinets, stations and rehabilitation centres is expanding. However, without regulatory-legal support, further introduction of inclusive education is pretty much fragile.

## THE QUALITY OF EFFECTIVE EDUCATION

*Quality and efficiency are perceived as the level and volume of educational product provided according to expectations of the market and society at a certain stage of development and with the real capability of a school graduate to compete both within the country and abroad. Issues of quality education in Kazakhstan are in line with conceptual approaches of EFA and MDG and are defined in the following indicators: personnel and financial resources, material and technical basis, learning process, textbooks and teaching-methodological materials, enrolment, graduation (at each education level), repetition rate, learning achievements and others.*

<sup>23</sup> NCEQA. 2007. National report. Astana. P. 10.

<sup>24</sup> Ministry of Education and Science of the Republic of Kazakhstan. 2007. Major Indicators of Secondary Education System in 2005 and 2006.

<sup>25</sup> NCEQA. 2007. National report. Astana. P. 10.

## Teaching staff

Based on the data of the ME&S of the RK (2006), 21.4 thousand teaching staff are engaged in pre-school education (47% of them have completed tertiary teacher education, 46.2% secondary special teacher education, 5.7% have incomplete tertiary teacher education and 1.1% are graduates of secondary school). Strengthening of the teacher training system mainly happens through oblast teacher training colleges as their graduates are characterized by the practical level of education, quick adaptation and integration into schools<sup>26</sup>. Qualitative composition of pre-school staff is expanded by other non pedagogical specialists such as psychologists, speech therapists, healthy lifestyle specialists, physical training instructors, choreographers, teachers of foreign languages, and fine arts, etc.

The total number of teachers in general secondary schools in 2005–2006 made up slightly more than 286 thousand people. About 89% of teachers of surveyed schools have an adequate level of teacher education (tertiary and secondary-special teacher education). In the rural areas and in classes with Kazakh as the language of instruction there are two times fewer teachers with teacher education backgrounds as in urban school groups with Russian language instruction. According to the data from the Republican In-Service Teacher Training Institute annually about 71 thousand

people take upgrading courses all over the Republic.

The feminization process of the education sector is a specific feature in Kazakhstan, with a predominantly female workforce in the educational system (80% of women work in secondary schools and 100% of women work in pre-school organisations)<sup>27</sup>. An important step in adjusting the situation is to attract male teachers to schools.

More than 6,000 teachers and educators work in special education institutions, 77.4% of them have tertiary education (4,681), however only 15.7% of teachers have special background to teach children with special needs. From 2002 to 2006 about 3,000 teaching staff from special education institutions have taken teacher re-training courses for advancement of their skills: speech therapists, school teachers and teacher from groups of developmentally delayed children, administrators and employees of special educational organisations – PMPC (Psychological, Medical and Pedagogic Committee), rehabilitation centres, specialists and employees who provide medical and social services.

«Average teacher/student ratio in pre-schools of the RK makes up one-to-nine while in primary schools –1/ 16.7. In basic and secondary general schools the teacher/student ratio is much lower compared to primary schools and makes up one teacher to 10.5 students.»<sup>28</sup>

## Content of education

Given the transition to a 12-year education SGES (State general education standard) which focuses on development of students' competence as a precondition for the formation of students' life skills in order to bring up socialization and competence of school graduates «More attention of school students of Kazakhstan at the age of 9–11 years is given to writing, reading, literature and mathematics; less time has been given

to social subjects, foreign languages, technology, physical training and sports. More hours are still given to reading, writing and literature for 12–14-year old students and less hours to foreign languages, and aesthetic cycle subjects, to physical training and sports»<sup>29</sup>.

New textbooks have been produced, alternative textbooks are being introduced, and there is a system of expertise of school textbooks.

<sup>26</sup> Uchitel Kazakhstan (Teacher of Kazakhstan). May 6, 2007. №№ 16–18. P. 9.

<sup>27</sup> Government of the RK. 2005. Gender Equality Strategy in the Republic of Kazakhstan for 2006–2016.

<sup>28</sup> NCEQA. 2007. National Report. Astana. P. 23.

<sup>29</sup> NCEQA. 2007. National Report. Astana. P. 40.

The free supply of textbooks, which have to be returned to school after use, make up 67.5% of the total number of books used (2006). The rest of the textbooks are purchased by students, which creates problems for the families with average and low-income levels (40-50% of rural students do not have necessary school supplies<sup>30</sup>). Supplied textbooks in many oblasts make up only 30-40% of needed materials for a class<sup>31</sup>. The state provides children from poor families, orphans and children without parental care with learning materials and textbooks. Schools are still in bad need of visual, didactic, laboratory and other materials, including electronic textbooks.

Teaching-learning materials for children with special needs are basically available for those who have access to special education programmes.

Informatization of the educational process is

one of the national priorities of Kazakhstan. Wide introduction of the newest information and communication technologies is a huge contribution to the development of interactive methods of life-long learning at all education levels that directly influences the competitiveness of the entire nation and is a precondition for the country joining the vanguard of developed nations of the world<sup>32</sup>. From 2001 to 2005 a positive trend to decrease the number of school students per computer has become obvious in schools of the Republic: if in 2001 one computer was available for 62 students, then in 2005 this indicator went down to 41 students. As of now, the practical use of computers and information technology in the teaching-learning process, maintenance of equipment in schools, upgrading of computers and access to the Internet are still problematic issues, especially in rural areas<sup>33</sup>.

## Monitoring of quality of education

In Kazakhstan a system for monitoring learning achievements is recognized and updated with the use of national and international test methodologies. Coordination of education quality monitoring efforts at the national level is done by the National Centre of Education Quality Assessment.

Based on the data of one of the surveys («Monitoring Learning Achievements in Primary School», 2005), the current system of primary education ensures children have the minimum necessary knowledge level: learning achievements of grade four students with regard to life skills make up 70.5%, literacy is at 68.2%, and math 63.9%<sup>34</sup>. Differences in learning achievements depend on the place of residence and language of instruction in the schools; however, there is practically no difference between boys and girls.

Children from vulnerable population groups are in need of special attention in terms of legislation, organisational issues, and training in teaching methodologies as well as provisions for staffing support focused on qualified diagnostics of the individual educational needs of the child.

«There are no dropout students during transition from primary school to basic general education»<sup>35</sup>. This has been true in the course of a number of years with regard to the transition of students to general secondary education.

The Ministry of Education and Science carries out intermediate monitoring of learning achievements for the primary level (Grade 4), basic school (Grade 9) and upper secondary level (national testing Grades 11-12). Intermediate monitoring results of students of grades

<sup>30</sup> Ministry of Education and Science of the RK/UNICEF/ SANDJ. 2005. Report on «Monitoring Learning Achievements in Primary School».

<sup>31</sup> NCEQA. 2007. National Report. Astana. P. 21-22.

<sup>32</sup> UN. 2006. Human Development Report. New Technologies for Human Development in Kazakhstan. P. 20.

<sup>33</sup> NCEQA. 2007. National Report. Astana. P. 21.

<sup>34</sup> Ministry of Education and Science of the RK/ UNICEF/ SANDJ. 2005. Report on «Monitoring learning achievements in Primary School».

<sup>35</sup> NCEQA. 2007. National Report. Astana. P. 31.

4 and 9 are higher in urban schools compared to rural ones, as well as in groups with Russian language instruction compared to Kazakh language classes<sup>36</sup>.

Analysis of the UNT results for 2006 shows that the average score in the Republic on the whole made up 63.2; in urban schools the score was 66.2 and in rural schools 60.2.

Difference in attendance rates of primary school students in the urban and rural areas is not very significant (about 98%)<sup>37</sup>. «The problem of school dropouts is of a hidden nature: official data does not reflect the real situation ... regardless of the close attention paid by

public offices to this issue»; monitoring of this issue is very formal<sup>38</sup>.

The number of new school buildings constructed in the country is taken from statistical data from the Ministry of Education and Science. The number of schools in need of major repair or in emergency condition is decreasing; however, the issue of materials and technical school infrastructure is still one of the most critical and varies considerably from oblast to oblast as do local budgets. Based on the data for 2006, 21.9% of kindergartens and 42.1% of schools were accommodated in the premises adjusted for them<sup>39</sup>.

## Education Financing

Education is financed out of the republican and local budgets (the local budget has the largest share). Expenditures for education in 2006 increased by more than 1.5 times compared to 2004. Twofold growth of expenditures for education is stipulated for 2007 compared to 2005 (about 4% of GDP).

However, the state financing scheme does not

cover existing education sector needs; it manifests problems of local budgeting. The current GDP level for education financing has not reached indicators for the year 1991 (6.5%) instead showing a level of 3.4% for 2006, indicating a failure to implement EFA recommendations on education financing, which has to be not less than 6%<sup>40</sup> of GDP.

**Table 2.1.** Expenses out of the state budget for education (2003-2006)

	2003	2004	2005	2006
State budget, tenge	152,733,756	195,582,541	261,210,382	316,923,117
% to GDP	3.31%	3.33%	3.51%	3.64%

Source: UNICEF. 2006. *National financing of education, health and social protection in the interests of the family and child in Kazakhstan*.

<sup>36</sup> NCEQA. 2007. National Report. Astana. P. 29.

<sup>37</sup> UNICEF. 2007. Draft MICS Report.

<sup>38</sup> Center for analysis of education policy «Bilim – Central Asia». 2006. Children in school but outside of learning. Almaty. P. 37.

<sup>39</sup> NCEQA. 2007. National Report. Astana. P. 18.

<sup>40</sup> UNICEF. 2006. National financing of education, health care and social protection in the interests of family and child in Kazakhstan.

## CONCLUSION

Kazakhstan has the necessary background for successful economic capacity building, stabilization of the social sector and the corresponding strengthening of the education sector.

Adoption of the new Law on Education (2007) has confirmed a traditional education policy aimed at the implementation of the constitutional right of citizens to have access to quality general secondary education within the context of the implementation of the strategy on strengthening the country's competitiveness. The aim of «increasing of equal access to quality education»<sup>41</sup> is still urgent.

The State programme of education development in Kazakhstan for years 2005-2010 ensures the provision of quality education at all levels following the principles of continuity and succession, highlighting the importance of ensuring a healthy learning environment, development of life skills and social-professional competences of secondary school graduates.

The introduction of a 12-year secondary education is aimed at improving quality through the enhancement of education specialization components, an important precondition of training a highly competitive specialist. In this content revision, improving teaching methods and technologies is of paramount importance.

Recognizing the importance of pre-school education within the scope of lifelong learning, the state continues to increase the network of preschool organisations and pre-primary services. However, it is necessary to expand access to pre-school institutions on a free of charge basis and improve training of preschool teaching staff.

Provisions for special needs education are a special concern of the government: provisions for different medical-social and psychological-pedagogic services and consultations are being introduced, specialized textbooks and training materials are being developed, new ideas of inclusive education are gradually being introduced as well. In spite of all efforts undertaken, there is a necessity to improve access to quality education for the given group of children via enhancing inclusive education legislation.

The concept of life-long learning implies «the process of continuous education ever since birth and in the course of the entire life»<sup>42</sup> for all the country citizens. Within the framework of this concept as well as within the framework of EFA and MDG it

is necessary to increase access to secondary education and enrolment of children from vulnerable groups. The number of teachers who upgrade their qualifications is increasing constantly. At the same time, the issue of introducing qualitative and quantitative indicators to monitor teacher training and retraining is of high importance.

As the system of education gets more and more financial support, the proportion of GDP channelled for educational purposes keeps on growing. However, serious investments are necessary to strengthen existing infrastructure and to improve school premises and the technical condition of classrooms and laboratories. Certain efforts are needed to decrease existing regional disparity in financing the education system.

Several issues are becoming more and more pertinent for decision-making at the national and local levels, including: improvement of financial and organisational management of education structures; the necessity of further information system development; and the establishment of an open informational space regarding the status and trends of the education sector. Issues of education statistics standardization have remained unresolved over a long time period.

Access to primary education has been ensured, and this Goal 2+ should be considered in Kazakhstan as ensuring universal secondary education. To monitor this goal implementation the following MDG+ indicators can be suggested: net enrolment ratio in secondary school by: a) respective age population group; b) availability of schools and places in them and c) survival rate to grade 5, grade 10 (11) including percentage of general secondary school graduates and percentage of new entrants in secondary vocational and higher education. Additional indicators may also be monitored: proportion of children that have completed pre-school education programmes (especially for children from rural areas, children from low income families and children at social risk); the quality of pre-school and school education (with a focus on the content of education, aimed at acquiring knowledge and skills applicable in real life, competitiveness of education at different levels, improvement of learning environment and etc.). Standardization of the national statistics in different agencies, especially between the Agency for Statistics of the Republic of Kazakhstan and the MoE&S is absolutely necessary in order to achieve access to localized MDG+ information on a regular basis.

<sup>41</sup> UN. 2004. Human Development Report. Kazakhstan. P.18.

<sup>42</sup> UN. 2004. Human Development Report. Kazakhstan. P. 69.



# MDG 3. PROMOTE GENDER EQUALITY AND EMPOWER WOMEN



## Target 4.

**Eliminate gender disparity in primary and secondary education, preferably by 2005 and at all levels of education no later than 2015**

Achieving gender equality is one of the key factors for sustainable human development. Both gender equality and the empowerment of women have been on the agenda of all major UN conferences, including the Millennium Summit in New York in 2000, the largest and the most representational event in the field of peace and development. The Millennium Declaration was endorsed by representatives of 191 countries, including 147 heads of states, and is one of the most important documents in the development area.

Achieving gender equality and the empowerment of women applies to all of the Millennium Development Goals, not just to Goal 3 where it is explicitly stated. It is absolutely clear that without progress in gender equality none of other MDGs can be fully achieved and vice-versa. Improvements with regard to gender equality depend on the resolution of gender-related problems found in the other

MDGs. For example, national poverty reduction strategies that do not take gender into account would only exacerbate the 'feminization' of poverty; women's rights will not be fully realized if reproductive health issues are not solved; and true gender equality is impossible without eliminating gender disproportions affecting the status of men. Without properly accounting for gender issues it will be difficult to achieve the Millennium Development Goals by 2015.

Kazakhstan pays great attention to gender issues. The Constitution and national legislation provide for equal rights for men and women. Kazakhstan ratified major international treaties on women's rights, including the UN Convention on Elimination of All Forms of Discrimination Against Women and its Optional Protocol. There is the functioning National Commission on Family Affairs and Gender Policy under the President of the Republic of

Kazakhstan. The statistic yearbook "Women and Men in Kazakhstan" has been published for seven years; the Concept of Gender Policy in the RK was adopted in 2005 and the same year the Decree of the President of the RK endorsed the National Strategy of Gender Equality for 2006–2016. Currently, the mid-term Government's Action Plan of the Strategy of Gender Equality for 2006–2008 is under implementation.

The Plan envisages 45 comprehensive events on the political and socio-economical advancement of women, improving women, men and adolescents' reproductive health, combating violence against women and children, and achieving gender equality in family relationships.

Draft Laws «On Equal Rights and Equal Opportunities of Men and Women» and «On Preventing and Combating Domestic Violence» were included into the Plan of Legislative Activities for 2009. However, despite the absence of legislatively fixed 30 percent quota for representation of women in party lists, the number of women-deputies in the lower chamber of the Parliament - has increased from 10.5% in 2004 to 15.9% in 2007, which is a manifestation of commitment to the principles of gender equality on the part of the leaders of the party that won the elections to Majilis in August 2007.

The National Commission on Family Affairs and Gender Policy under the President of the Republic of Kazakhstan together with UNIFEM held a Regional Consultation «Gender Equality and Human Rights in National Development Planning and Budgeting in CIS countries: Towards Ghana 2008». The Consultation in Almaty on May 20, 2007 provided a senior-level forum for policy-makers and development practitioners to discuss challenges and opportunities in the process of making national development planning, aid, and development effectiveness gender-responsive, based on the experience of CIS countries.

Participants discussed and adopted the "Almaty Declaration" as a contribution from the Commonwealth of Independent States to the forthcoming High Level Forum on Aid Effec-

tiveness, to be held in Ghana in September 2008, for the expected "Accra Agenda for Action". In terms of both development and aid effectiveness, this Declaration adds great momentum to the work on National Development Strategies and to the second generation of Poverty Reduction Strategies in the CIS, to reinforce both development partners and countries' commitments to aligning development planning and budgeting processes with nationally agreed gender priorities, and expanding intra-regional cooperation within the CIS region.

At the 63rd Session of the UN Economic and Social Commission for the Asian-Pacific region (UN ESCAP) that took place in Almaty in May, 2007, Mr. Nursultan Nazarbayev, the President of the Republic of Kazakhstan in his welcoming speech "Achievement of Millennium Development Goals in the Countries of Asian-Pacific Region" highlighted the adherence of the Government to achievement of gender equality and promotion of women's rights. He expressed his complete support for the Strategy of Gender Equality and Action Plan, endorsed by the Government, and pointing out the urgency of transition from declarations to real implementation of the Strategy.

However, it should be recognized that differences in the position of women and men in Kazakhstan are still significant. Equal rights guaranteed by the Constitution are not backed up by guaranteed possibilities. Women are inadequately represented at the decision-making level and there is gender inequality at the labour market.

Progress in achieving this target is assessed based on the following indicators:

- ♦ Ratio of girls to boys in primary, secondary and tertiary education
- ♦ Ratio of literate females to males of 15-24 year olds
- ♦ Share of women in wage employment in the non-agricultural sector
- ♦ Proportion of seats held by women in national parliament

## Education

Pursuant to the data of the Millennium Development Goals' Report for 2005 Kazakhstan has already implemented Target 4 – eliminate gender disparity, in primary and secondary education, preferably by 2005, and in all levels of education no later than by 2015.

When speaking about aspects of education in the Republic, mention should be made of the fact that annually in parallel with the GDP growth absolute increase of costs for education are observed but no financing growth in proportion to the GDP for education. During the last three years expenditures of the state budget for education were at the level of 3.4%. Given the aforementioned, it could be noted that it is high time for Kazakhstan to introduce new advanced instruments of budget planning like gender budgeting and budget initiatives in the interests of children.

Based on the MICS 2006 results there is practically no difference between attendance of primary school by boys and girls at the national level (Table 3.1.).

An especially vulnerable group with regard to education are children of oralmans, specifically, girls. According to the results of the survey pertaining to children of oralmans in Shymkent implemented by the Kazakh National University, the most obvious problem in terms of access to secondary education for children of oralmans is

the fact that in some families there is a tradition which stipulates that girls must not attend school until having reached the age of 15-16.<sup>43</sup>

Oralmans, emigrants and migrants get special support from the state. 450,000 oralmans arrived in Kazakhstan by 2005. The majority of oralmans have settled in the southern regions due to the proximity of similar traditions and mentality (64.9% reside in South-Kazakhstan, Almaty, Mangistau oblasts). Families that have moved in experience difficulties with employment, housing, etc. due to inadequate knowledge of the Kazakh language, mononational communication, and low qualifications, etc. In such a situation a well-balanced policy of reintegration and adaptation is necessary, especially for children. Children of oralmans have problems of an ethnic and cultural nature<sup>44</sup>.

Based on the survey materials of the educational centre “Bilim – Central Asia,” the education policy for oralmans lacks integrity. In different oblasts it is implemented differently, notwithstanding the fact that all possible issues are stipulated in the respective legislation.

Major problems that oralmans encounter when getting secondary education are: the language barrier; illiteracy of parents (for example, writing in the Kazakh language); low prestige of education among oralmans; and ethnic and cultural dif-

**Table 3.1.** Ratio of female and male students within the systems of primary and secondary education

Quintiles based on well-being index	The poorest	Poor	Middle	Rich	The richest
Net attendance ratio of primary school, girls	99.0	97.2	96.5	97.8	96.2
Net attendance ratio of primary school, boys	98.1	98.7	98.7	98.3	99.1
Sex equality index for primary school*	1.01	0.98	0.98	0.99	0.97
Net attendance ratio of secondary school, girls	94.5	95.6	96.1	94.7	96.5
Net attendance ratio of secondary school, boys	93.6	94.3	95.5	96.0	96.9
Sex equality index for secondary school	1.01	1.01	1.01	0.99	1.00

Source: Multi-indicator Cluster Survey 2006. Final Report. Astana, 2008.

<sup>43</sup> Gender equality in Millennium Development Goals. Annex to the Report on Millennium Development Goals in the republic of Kazakhstan. UNIFEM. 2006.

<sup>44</sup> Social partnership as a precondition for adaptation and integration of oralmans. New School. Bishkek. 2006.

**Table 3.2.** Number of students by types of schools as of the beginning of the academic year, %

Types of school	2005/2006		2006/2007	
	Distribution by sex		Distribution by sex	
	Females	Males	Females	Males
Schools (without students of special correction schools)	49.1	50.9	49.4	50.6
Primary vocational schools	32.6	67.4	31.2	68.8
Colleges	53.0	47.0	53.1	46.9
Tertiary schools	57.9	42.1	58.1	41.9
Post-graduate courses	62.8	37.2	66	34
Total	50.9	49.1	51	49

Source: The Agency for Statistics of the Republic of Kazakhstan. 2007.

ferences between oralmans and local Kazakhs. Teachers say that regardless of state support oralman-parents do not allow some of their children to get an education, especially girls, basically due to cultural differences (lack of the system of separate teaching for boys and girls, and the school dress code does not stipulate head-dresses, etc.)<sup>45</sup>.

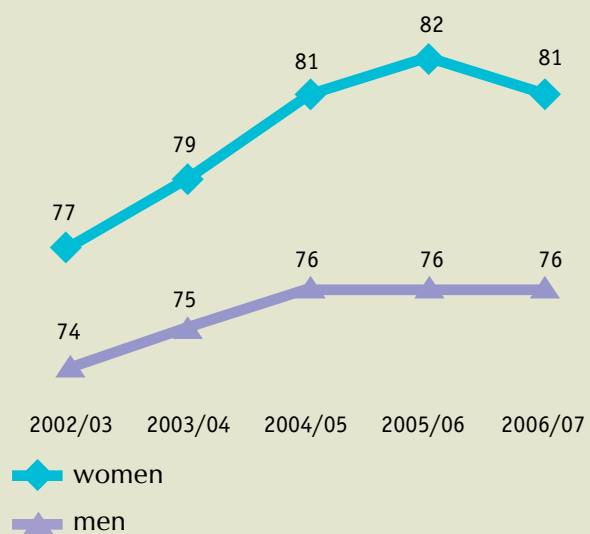
According to the data of the Agency for Statistics of the Republic of Kazakhstan, the aggregated coverage share of the population between the ages of 6-24 by education (general coverage indicator) is higher among women than among men (Graph 3.1.)<sup>46</sup>.

The higher education coverage rate of women is due to the prevalence of women in higher education – in colleges, tertiary schools and post-graduate courses (Table 3.2.).

At the same time there are gender stereotypes in profession selection: girls basically choose humanitarian spheres, boys technical. But the situation is gradually changing given the growing needs in industrial economy sectors. Thus in the 2004-2005 academic year there were 33% of women getting a technical education in the country's higher schools, then in the 2005-2006 academic year their proportion made up 40%; a considerable increase (by 25%) of the total number of tertiary school students.

**Graph 3.1.**

Aggregate education coverage share of the population at the age of 6-24 (total coverage rate), %



Source: Women and Men of Kazakhstan. Gender statistics. The Agency for Statistics of the Republic of Kazakhstan. Almaty, 2007.

For the information on employment please see Goal 1 (target 1).

<sup>45</sup> Foundation for the support of education initiatives. Papers of Central-Asian Scientific Conference «New School Opportunities». Bishkek. 2006.

<sup>46</sup> Total coverage rate – ratio of the number of students regardless their age in comprehensive schools, VTS, higher schools and the number of population at the age of 6-24.

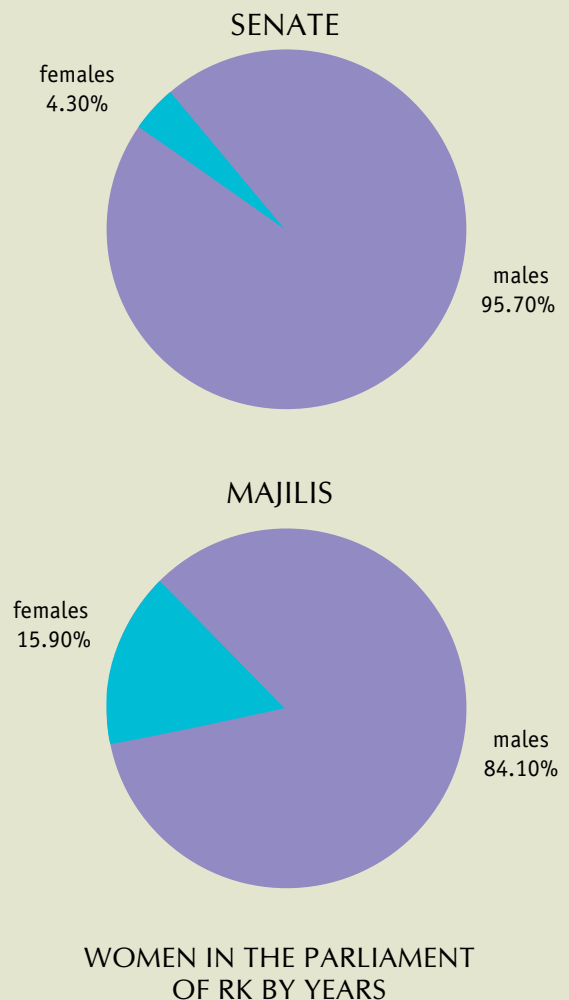
## Public Administration

As of now women are underrepresented in governmental and political structures in Kazakhstan. There is a typical gender power pyramid, where women can be found on the lower and middle levels but practically are not present in high-ranking positions (at the decision-making level). Based on the data of special elections to Majilis, the share of women in the Parliament (Majilis Deputies) in 2006 increased to make up 15.9%, which is the highest indicator both in percent and in absolute graphs (17 people). The proportion of women on the whole in the Parliament in 2007 made up 12.7%.

While within the total number of civil servants the specific weight of women in local executive bodies makes up 58%, within administrative staff it amounts to 59.5%. Such distribution of employees in different structures of public administration is a reason to discuss low representation of women in politics, which deprives the society of the access to mechanisms of gender sensitivity in political participation and representation.

**Graph 3.2.**

Characteristics of the composition of Senate and Majilis in 2007, by sex



Source: *Composition of the Parliament in the Republic of Kazakhstan.* [www.parlam.kz](http://www.parlam.kz)

## Violence against women

Protection of women against violence should be first of all targeted at the formation of an absolute non-acceptance of violence by the society and especially against women that constitute groups at risk determined by social factors and other reasons.

In 2006 there were 40,394 (28.6%) registered cases of crime with regard to women, out of them 7,974 (26.2%) were grave and very grave crimes. Sexual violence against women makes up a very high proportion out of the total number of crimes – 80.1%. However, formal statistical data related to infringements of the law do not reflect cases of domestic violence. In January-May 2007 there have been 258 registered offences classified by Article 105 of the CC RK as «Mild Health Injuries». Out of them 122 (47.3%) were against women and 31 (12%) against adolescents. During the same period murders and assaults made up 718 cases, out of which 171 (23.8%) were against women and 26 (3.6%) against adolescents. Administrative offences like beatings are not reflected in gender statistics at all.

A special role in the protection of women from violence belongs to crisis centres that have not only help lines but create special shelters for

women who are victims of violence. Based on data related to clients of crisis centres, more than 90% of cases of violence against women are committed in the presence of adolescent children, which is equal to violence against the children themselves.

Local authorities together with the Union of Crisis Centres work towards putting together a social infrastructure for the support and protection of the rights of the child through prevention and timely interference into family problems. The Ministry of Labour and Social Security of the Population of the RK together with NGOs opened up 16 centres to provide social services to families and children. In addition, different competitions have been initiated like «The best family of the year» and «Meetings of Parents». In 2004-2005 more than 100,000 parents, specialists from education and health care sectors, social protection agencies, judicial bodies, and centres on AIDS prevention and healthy life styles took part in oblast and local meetings, conferences, and «round table» meetings. The Ministry of Education and Science of the RK has created a special web-resource with the aim of pedagogic interaction between parents and teachers<sup>47</sup>.

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<sup>47</sup> The Second and Third Kazakhstan Progress Reports to the Committee on the Rights of the Child under the Government of the RK.

## CONCLUSION

Kazakhstan has been addressing gender inequality. Thus, the Gender Equality Strategy was adopted and its Action Plan endorsed, and the draft Law “On Equal Rights and Opportunities for Men and Women” is being considered by the Majilis. This draft Law is based on the model law, passed by the CIS Inter-Parliamentary Assembly with a special focus on the introduction of special measures (quotas) in order to increase representation of women at the decision-making level. Political parties will have to take the necessary measures in order to develop the capacity of women party members to train them in election technologies, following the example of developed countries with strong democracies to introduce a quota system for women (not less than 30%) when nominating a candidate for elected and appointed positions.

Adoption of this Law will make it possible to implement the policy of elimination of discrimination against women, specifically to incorporate the principle of equal rights and opportunities of men and women into the national legislation of Kazakhstan and thus to ensure practical implementation of this principle.

Regardless of obvious support for this Draft Law, the supreme high political will of the country leaders is needed to pass the law with mandatory clauses to establish a state body for equal rights, to introduce special measures (quotas), without which the Draft Law risks to be superficially declarative.

The Draft Law “On Domestic Violence,” submitted by the Ministry of Interior to Majilis in September 2007, is also an important instrument to protect the rights of women – the right to life free from violence. The Government of the RK together with NGOs have been working on prevention and raising public awareness, on setting up crisis centres for victims of domestic violence, and on putting together special

subdivisions of the MOI RK to protect women against violence. However, in order to comprehensively address the problem of violence prevention and elimination, the work done is not enough. Adoption of a legislative act and development of mechanisms for its implementation will help to protect the most vulnerable family members and will contribute to ensuring that in the future Kazakhstan families will be free from violence.

Improvement of sex disaggregated statistic data collection and analysis has to be a priority to promote gender equality and to ensure a more comprehensive coverage and better quality of statistical reports on a regular basis. This has to be funded by the state, which will allow not only for better quality monitoring of gender policy implementation, but also to better present new initiatives, supported by real graphs.

At present, Kazakhstan is fertile ground for the introduction of gender-sensitive budgets at the national and local level. The Project “Social (gender) Budgets in Kazakhstan” implemented by UNIFEM together with the National Commission on Family Affairs and Gender Policy, aims to build the capacity of the National Commission, civil servants, members of the Parliament, and women’s NGOs in gender analysis application at all the stages and forms of the budgeting process.

Under this project, several local and national budget and state programmes will undergo gender analysis, a gender budgeting guide for civil servants will be developed, a training manual on gender budgeting to be used during training and re-training of civil servants will be designed, and mechanisms for civil society participation in the budgeting processes will be developed.

However, high political will is necessary for the full-fledged use of instruments of gender budgeting, the will that could ensure sustainable incorporation of gender into the budgeting process.

# MDG 4. REDUCE CHILD MORTALITY

**Target 5.**  
Reduce by two-thirds  
between 1990-2015, the  
under-five mortality ratio

## Importance for Kazakhstan

One of seven long-term priorities of the national Strategy «Kazakhstan-2030» – to improve the health of women and children – is directly linked to MDG 4.

The first international human rights document, which Kazakhstan joined, was the Convention of the Rights of the Child – a major treaty reflecting a wide range of political, economic and cultural rights of children. One of the key Convention principles is the right of the child to life, survival and development.

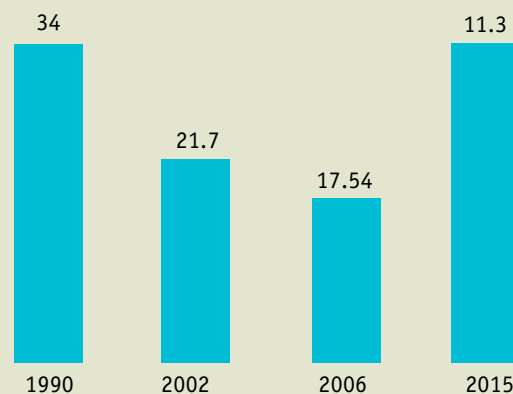
The Law of the RK «On the Rights of the Child in the Republic of Kazakhstan», passed in August 2002, regulates the implementation of major rights and interests of the child guaranteed by the Constitution. Among other provisions the Law states that one of the major rights of the child is the right to health care.

Moreover, additional measures are currently being devised in the National Plan of Major Directions to implement points from the annual (2005-2007) Addresses of the Head of the State to the people of Kazakhstan concerning maternal and infant mortality ratio reduction in the Republic of Kazakhstan<sup>48</sup>.

<sup>48</sup> Regulation of the Government of the Republic of Kazakhstan of 20.04.2007, № 319 «On Endorsement of the Action Plan to Implement the National Plan of Major Directions (measures) on the Implementation of the Annual 2005-2007 Addresses of the Head of the State to the People of Kazakhstan for 2007-2009».



**Graph 4.1.** Under-five child mortality ratio (per 1,000 live-births) in the RK



Source: The Agency for Statistics of the Republic of Kazakhstan.

Progress in achieving this target is assessed based on the following indicators:

- ♦ Under-five mortality ratio
- ♦ Infant mortality ratio



## MDG 4 status in Kazakhstan

According to the data of the Ministry of Health RK (MOH RK), infant and child mortality in Kazakhstan are steadily decreasing: from 17.01 and 21.77 per 1,000 live births respectively in 2002 to 13.91 and 17.54 respectively in 2006 (Graph 4.2.).

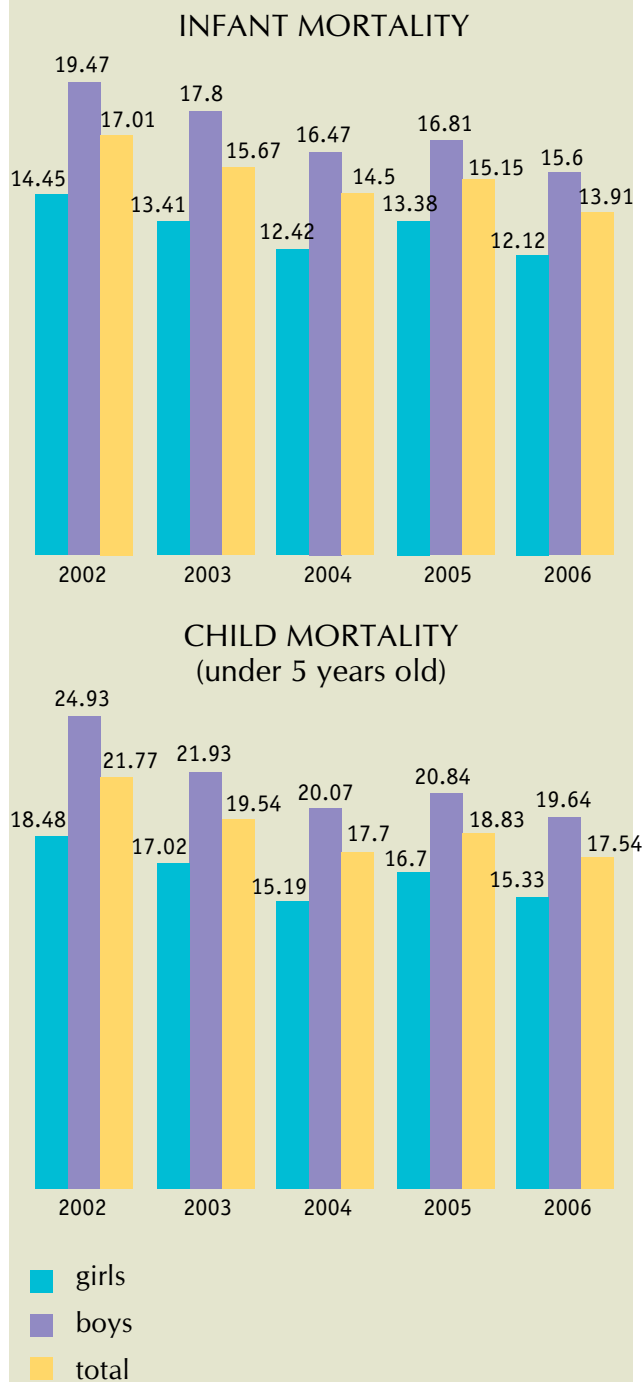
The given trend is also confirmed by the surveys carried out in Kazakhstan at the level of households through interviewing reproductive age women through Demographic and Health Surveys (DHS), held twice in Kazakhstan in 1995 and 1999, and Multiple Indicator Cluster Survey (MICS), held in 2006 (Graph 4.3.). However, it should be noted that official sources and the outcomes of the surveys show significant discrepancies in infant and child mortality. (Tables 4.1. and 4.2.).

The reason for such a significant difference lies in use of different livebirth and stillbirth definitions (MOH RK – Soviet period definitions, DHS – international (WHO recommended) definitions) and possible underreporting of deaths among children. Different approaches to livebirth definitions cause distortion of real infant mortality rates in the Republic of Kazakhstan due to registration of some livebirths as late miscarriages or stillbirths (Table 4.3.).

According to the analysis made in 2006 with regard to the investigation of the causes of infant and child mortality, up to 5,000 children aged 0 to 5 die annually in Kazakhstan, where newborns account for almost half of these deaths. The major mortality causes for children under five are perinatal conditions, infections (ARI or diarrhea), congenital abnormalities, or accidents and traumas (Graphs 4.4., 4.5.).

The increase in losses among children due to accidents and trauma is of concern. During the last 10 years one child under 12 months of age and two children aged 1 to 5 per 1,000 children born die due to these reasons in the Republic of Kazakhstan. Annually, up to 200 thousand accidents and traumas are registered among children under 14 years of age; of these 1.2 percent becomes disabled. The share of these causes within the structure of mortality among children aged 1 to 5 years make up 26–33 percent on average over the last ten years<sup>49</sup> (Graph 4.6.).

**Graph 4.2.** Official statistics data on infant and child mortality ratio, 2002–2006 (per 1,000 live births)

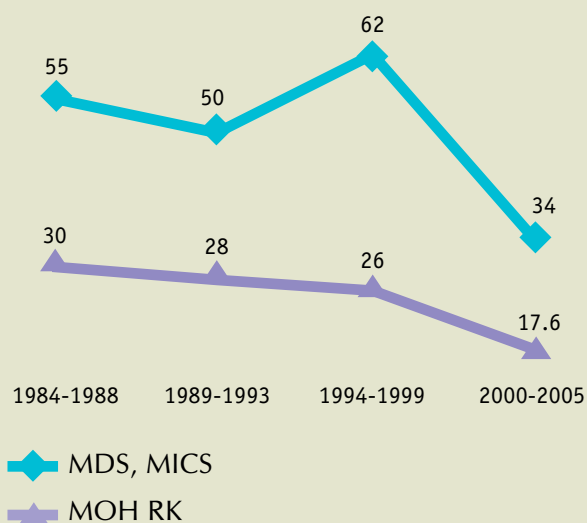


Source: The Agency for Statistics of the Republic of Kazakhstan.

<sup>49</sup> Analysis of Infant and Child Mortality rates: Problems, Resolution Ways. UNICEF/WHO. Astana. 2006.

**Graph 4.3.**

Dynamics of infant mortality ratio, Kazakhstan, 1984-2004



Source: MOH RK (Yearbooks), MDS 1995, 1999, MICS. 2006.

According to data obtained through the investigation of the causes of infant and child mortality, about half of deaths due to traumas and accidents are comprised of thermal and chemical burns at 54 percent, then mechanical asphyxia at 26 percent and traffic traumas, accidents, etc. at 20 percent. Often these children die at home and only 37 percent receive medical assistance. Among those dead the largest number are boys (63 percent).

Inadequate level of knowledge in the families and poor health services providers also makes an impact on breastfeeding. It was proved that exclusive breastfeeding of children initiated immediately after birth and continued up to six months is a key factor in protecting children from infections and an ideal, efficient and safe source of micro-nutrients. However, according to MICS, exclusive breastfeeding is now practiced only with regard to 16.8 percent of children under 6 month of age. Continuation of breastfeeding until a child is two years of age contributes to his harmonious growth and development and prevents micronutrient de-

**Table 4.1.** Infant mortality ratio by different sources

Source	Observation period	Infant mortality rate (per 1000 of live births)
MOH RK	1997-2000	22
	2001-2005	15
DHS	1994-1999	62 (95%, CI: 45-79)
MICS	2000-2005	31.8

Source: Analysis of Infant and Child Mortality Rate: Problems, Resolution Ways. UNICEF/WHO. Astana. 2006.

**Table 4.2.** Infant mortality rate and mortality rate among children aged 1 to 5 based on data from different sources (per 1,000 livebirths)

Source and observation period	Infant mortality rate		Mortality rate among children aged 1 to 5
	Neonatal	Post-natal	
MOH RK 1997-2000	11	10	7
DHS 1994-1999	34	28	10
MICS 2000-2005	31.8		36.3

Source: Report for the Ministry of Health of the RK. Analysis of Infant and Child Mortality Rate: Problems and Resolution Ways. Astana. 2006.

**Таблица 4.3.**

Livebirth definitions used in Kazakhstan compared to those recommended by WHO

**A BABY BORN AFTER 28TH WEEK OF PREGNANCY**

No life signs	No breathing, but other life signs are present	Dies during the first seven days of life	Survives through the first seven days of life
Kazakhstan	Stillbirths	Livebirths	
WHO Stillbirths	Livebirths		

**A BABY BORN BEFORE 28TH WEEK OF PREGNANCY OR WITH THE BODY WEIGHT LESS THAN 1,000 G AND LENGTH LESS THAN 35 CM**

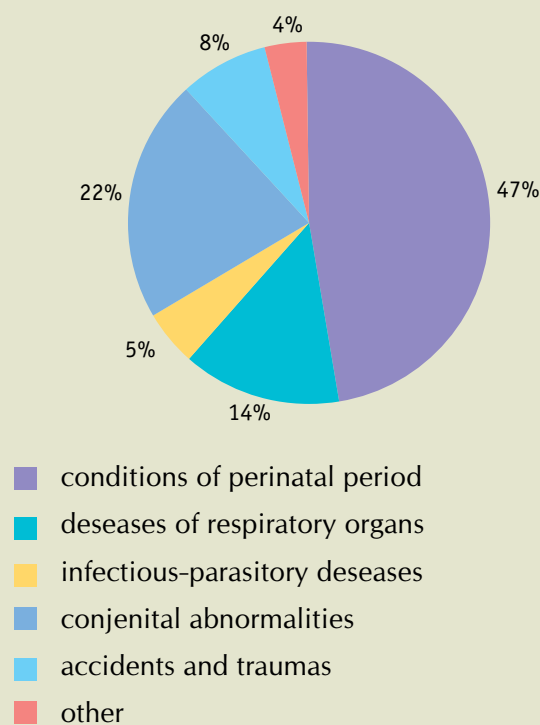
No life signs	No breathing, but other life signs are present	Dies during the first seven days of life	Survives through the first seven days of life
Kazakhstan	Miscarriages		Livebirths
WHO Stillbirths	Livebirths		

iciency development. Traditionally Kazakhstan was a country with a very high rate of breastfeeding, but now many mothers stop breastfeeding too early. Thus, only 57.1 percent children at the age of 12-15 months are still breastfed and only 6.2 percent of children – at the age of 20-23 months. Mention should be made that in rural areas the proportion of breastfed children is much higher compared to urban areas. The share of children that get timely supplementation at the age of 6-9 months is somewhat higher in urban areas.

Considerable progress was made with regard to the initiation of breastfeeding. In 1999 only 27 percent of children initiated breastfeeding within the first hour after birth and 66.1 percent of children were given mother’s milk during the first day of his/her life.<sup>50</sup> MICS reports an improvement in these rates for 2006 at 64.2 percent and 87.8 percent respectively.

Some improvement of the latter indicators is due to the successful integration of the Baby Friendly Hospitals Initiative in Kazakhstan. A survey implemented by UNICEF manifested that 97 percent of maternity hospitals practice early breastfeeding following normal births and 54 percent following cesarean sections. Nevertheless, duration of the

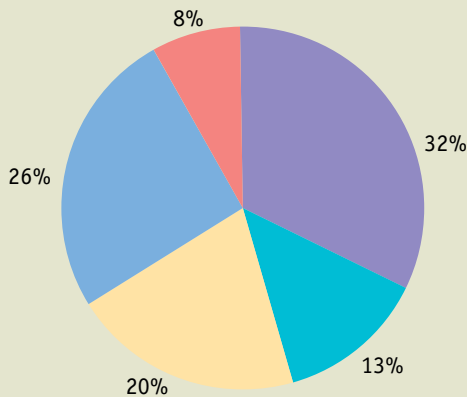
**Graph 4.4.** The structure of infant mortality by causes 2001-2005



Source: The Agency for Statistics of the Republic of Kazakhstan.

<sup>50</sup> Medical and Demographic Survey in Kazakhstan, 1995. Almaty. 1996.

**Graph 4.5.** Child mortality (1-5 years of age) by causes 2001-2005



- diseases of respiratory organs
- infectious-parasitry diseases
- accidents and traumas
- congenital abnormalities
- other

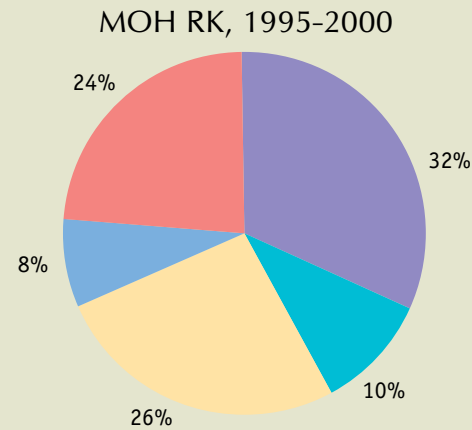
Source: The Agency for Statistics of the Republic of Kazakhstan.

first breastfeeding in 50 percent of cases does not exceed 10-15 minutes instead of 60-90 minutes, which implies short skin-to-skin contact. As a result the passive transmission of antibodies with colostrum from mother to child is decreased, which results in the colonization of newborns predominantly with hospital microflora and places them at high risk of infectious diseases.<sup>51</sup>

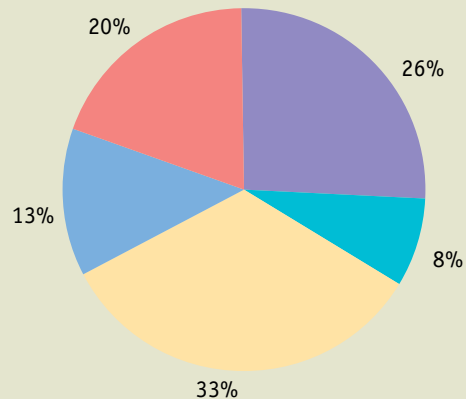
Another unfavourable situation has been identified with regard to early childhood development in a family. The joint survey of the National Healthy Life Style Promotion Centre (NC HLSP) and UNICEF<sup>52</sup> revealed that in general parents, family members and health workers lack knowledge and skills pertaining to health promotion and child development reinforcement. For example, 16 percent of interviewed parents do not take precautionary measures to prevent child traumatism. Though the majority of parents and families do pay attention to symptoms of child sickness such as a high fever and cough, their knowledge about when to seek health care in the event their child

**Graph 4.6.**

Proportion of accidents and traumas within the structure of child mortality of age 1 to 5



MOH RK, 2001-2005



- Acute Respiratory Infection
- Diarrhea
- Accidents, traumas
- Conjenital abnormalities
- Other

Source: The Agency for Statistics of the Republic of Kazakhstan.

suffers from danger signs such as loose stools, seizures and muscle pain, etc., is inadequate. As a result they are late to look for qualified health care, which results in anabasis or the death of a child. It has also been found that the efficiency of services provided by health workers to children during home visits is inadequate.

<sup>51</sup> Assessment of the current progress of the Programme «Support Promotion and Protection of Breastfeeding in Maternity Hospitals of the Republic of Kazakhstan». UNICEF. 2006.

<sup>52</sup> Parenting in Kazakhstan: study of parenting and childcare in Kyzylorda and East-Kazakhstan oblasts. NC HLSP/UNICEF. 2004.

## Major factors influencing MDG 4 progress in the RK

Major challenges of paediatric service determining the existing mortality rate among children under 5 are as follows:

1. Inconsistency of statistical data with managerial needs of the system: use of livebirth definitions that differ from those applied worldwide, manipulation of the categories of statistical data, stereotyped data interpretation.
2. Inadequate perinatal and post-natal care (aggressive delivery: excessive stimulation, inadequate interventions, lack of delivery monitoring, limiting of positioning during delivery, non-following thermal regime, lack of support to exclusive breastfeeding, late attachment to breast, late and inadequate primary newborn resuscitation), causing neonatal mortality with intermediate (2,000-2,500g) and normal weight (more than 2,500g), mainly due to asphyxia, infections and birth traumas.
3. Low health index of reproductive age women and complicated pregnancy (severe gestosis), determined by previous abortions, sexually transmitted infections (STI) and anaemia, causing births of newborns with low and very low weight and contributing to 15 percent of early neonatal mortality.
4. Misuse of prescribed medication, excessive and long-term hospitalization and the lack of a standardized approach in clinical management of childhood illnesses at the level of primary health care (PHC) and primary hospitals are determining factors for early mortality due to acute respiratory infection (ARVI, pneumonia) and diarrhoea.
5. Inadequate and often formal patronage observation for healthy children in order to ensure

optimal feeding practice (exclusive breastfeeding, supplementary food), safe environment for child growth and development and disease prevention cause high under 5 mortality rates due to infections, traumas and accidents.

Mention should be made that the majority of causes of early mortality might be prevented by the current healthcare system if it were subject to upgrades and improvements of dataware and equipment while strengthening personnel and managerial potential with regular situational analysis.

Such capacity building should be based through the use of international experience, through the implementation and introduction of major WHO/UNICEF strategies «Safe Motherhood» and «Integrated Management of Childhood Illnesses/better parenting», which maximally meet the requirements of the country's health care system. These strategies contribute to its standardization through introduction of proposed clinical protocols; they help to upgrade the professionalism of health workers and to improve mechanisms of routine monitoring through training courses and by carrying out regular reviews of system achievements for managerial purposes.

As of now these strategies have been implemented at the expense of international organizations, whose activity is limited to technical assistance – providing new technologies and their adaptation to country conditions and basic staff training. In the short-term period the country has to ensure its own capacity for the continuation of their implementation at the national level. Major directions for the inculcation of new technologies include: staff training, standardization of health care services to children at the primary health care level and management improvement.

## Public expenses for mother and child health care

### The share of budget expenses for health care<sup>53</sup>

In the space of the last 6 years expenses for health care made up about 10 percent of the total budget expenses (Table 4.4.). Govern-

ment spending for health care in the first place is meant to cover the guaranteed volume of free health care services, financed out of local budgets, as well as the implementation of republican programmes targeted at control of TB and other social diseases.

<sup>53</sup> Report of the Center of Analysis of Social Problems. Public Budget Expenses for Education, Health Care and Social Protection in the Interests of Family and Child. UNICEF Project. Astana. 2007.

**Table 4.4.** Expenditures for health care, 2001–2006, Mln. tenge

	2001	2002	2003	2004	2005	2006
State budget	62,323	71,119	89,781	131,184	185,456	223,373
Republican budget	13,892	12,018	19,104	29,224	56,283	80,012
Local budgets	48,430	59,102	74,112	107,074	150,316	185,783

Source: Data of the Ministry of Finances of the RK for 2001–2006

## National policy

At this point of time the first stage of the national health system reforming is being finalized and further measures to improve care of women and children are under development. Since 2006, principles of safe motherhood are being implemented in the country based on the *Prkaz* (Ordinance) of the MOH RK. The transition to WHO recommended live-birth and still-birth criteria is scheduled for 2008, which will make it possible to get objective statistic information and use it to resolve identified problems.

To ensure the necessary conditions for the activity of health workers, measures aimed to improve the system of their labour remuneration and to introduce the principle of differential remuneration based on the «final result» (given qualification level, quality and volume of services provided) are paramount. These measures

are directly related to the increase of sector financing and ensuring a guaranteed volume of free health services.

Nevertheless, regardless of the considerable growth of health care financing, major health indicators in the section on motherhood and childhood have not changed considerably, which signals the necessity of targeted financing. Study and registration of the needs of target population groups during budget planning and allocation of funds is needed, as is flexibility of budgeting indicators, oriented at final results.

Moreover, programmes of staff training and re-training are revised in line with international standards. The Legislation Institute of the RK has drafted the Code of the Republic of Kazakhstan “On Health of the People and Health System”. It is assumed that the Code will be enforced as of January 1, 2009.

## CONCLUSION

Unfortunately, it should be noted that all the recommendations and conclusions given in the previous Report for 2005 are still pertinent and much is yet to be done in order to reduce the child mortality rate by 65 percent. Moreover, the scheduled introduction of the live-birth criteria as of 2008 in the country will result in an increase in infant mortality registration, which makes achievement of this goal hardly probable. Nevertheless, recognizing the importance of introducing this criteria the Government has declared a temporary moratorium for admin-

istrative measures on the forecasted growth of these medical-statistic indicators<sup>54</sup> in the Programme of the Government of the Republic of Kazakhstan for 2007–2009, in which a complex of measures is stipulated in order to resolve socially important health problems and «to reduce maternal and infant mortality while systematizing specific approaches and measures successfully tested in the world. Hopefully, these measures will be practically implemented in line with plans on a sustainable basis. Only concerted efforts will lead to the stabilization of this situation while ensuring its improvement to move toward overcoming the crisis in this sector.

<sup>54</sup> Edict of the President of the RK № 310 of 06.04.2007 endorsing the Programme of the Government of the Republic of Kazakhstan for 2007–2009.

# MDG 5. IMPROVE MATERNAL HEALTH

**Target 6.**  
«Reduce by 3/4, between 1990 and 2015, the maternal mortality ratio. By 2015 achieve universal access to reproductive services and goods



Progress in achieving this target is assessed based on the following indicators:

- ♦ Maternal mortality ratio
- ♦ Proportion of births attended by skilled health personnel

## Maternal mortality and reproductive health, concept definition

According to definition of the World Health Organization (WHO) the concept of maternal mortality covers mortality among women in pregnancy or within 42 days after delivery due to any reason, directly related to pregnancy or due to a condition that gets aggravated by pregnancy or its management (except accidents). WHO recommends defining maternal mortality ratio as the number of maternal deaths per 100 thousand livebirths.

MMR is the reflection of risk women are exposed to in antenatal and perinatal periods. This risk depends upon a wide range of factors: general social-economic conditions, wom-

en's health status prior to pregnancy, different pregnancy and birth-related complications, and upon the functioning of health agencies and bodies directly or indirectly responsible for providing health care services to pregnant women and obstetric care.

Maternal mortality is the result of the reproductive function implementation by a woman and that is why it cannot be considered separately from reproductive health issues either globally or nationally. Due to the same reason, the UN Interagency Expert Group on MDG made a decision to complement the global target – reduce by 3/4, between 1990 and 2015, the

maternal mortality ratio (MMR) by the target, and achieve universal access to reproductive services and goods.

WHO defines health as the state of complete physical, mental and social well being, and not only absence of illness or infirmity. Reproductive health concerns reproductive process, functions and systems. The UNFPA concept of

reproductive health based on the Programme adopted by International Conference on Population and Development (Cairo, 1994) implies that people are able to enjoy a responsible, satisfying and safe sexual life, that they have reproductive opportunities and are free to make decisions regarding full-fledged implementation of these opportunities.

## Political commitment of the country to maternal mortality control

Mother and child health care is still a priority social policy direction of the Republic of Kazakhstan. Presidential Decree № 310 was issued on April 6, 2007 with the aim to back up the implementation of the Development Strategy of Kazakhstan as of 2030, which endorses the National Plan of major activity directions and the Programme of the Government of the Republic of Kazakhstan for 2007–2009. Special attention in these documents is given to the following:

- ♦ Ensuring health care services to reproductive age women and children within the framework of a guaranteed volume of free health care;
- ♦ Carrying out annual prophylactic examinations and rehabilitation of children and reproductive age women;
- ♦ Ensuring pharmaceuticals for pregnant women since 2005 for management and prevention of iron- and iodine deficiency disorders;
- ♦ By 2007 finalization of the furnishing of maternity hospitals with state-of-the-art medical equipment;
- ♦ By 2007 ensuring coverage of pregnant women with regular medical check-up;
- ♦ Updating and implementation of auxiliary reproductive methods and technologies by 2008, including screening programmes of antenatal diagnostics of congenital and hereditary fetal disorders with the use of state-of-the-art technologies of genetic analysis and family planning;
- ♦ Implementation of family planning and healthy life style promotion measures.

In his annual Address to the People of Kazakhstan in March 2007 the President of the country, while defining major directions of national and international policy, noted the exceptional importance of social protection for maternity and childhood. In the last years the Ministry of Health of the Republic of Kazakhstan has developed a number of regulatory legal acts targeted at strengthening the material and technical basis and at the integration of effective perinatal technologies into maternity hospitals based on evidence-based medicine. Among them – the Ordinance «On Minimal Material and Technical Supply of Maternity and Paediatric Facilities of the RK», which regulates a major list of medical equipment and medical goods for the provision of health care to women and children. Besides that, in August 2006 the Ministry of Health endorsed the Ordinance «On Introduction of Effective Technologies of Perinatal Care into Practice of Maternity Hospitals», which includes principle provisions regarding implementation of the programme «Ensuring Safer Pregnancy», recommended by WHO. In October 2006 the Ordinance of the Minister of Health of the Republic of Kazakhstan №491 «On Inculcation of Youth-friendly Services» was issued, which stipulates setting up clinics for youth with the purpose of their reproductive health protection.

On the whole in Kazakhstan there is an adequate regulatory-legal basis and absolute commitment of the Government to ensure maternal mortality reduction in the country.



## Maternal mortality in Kazakhstan

One woman dies every minute and about half a million women die annually from pregnancy and birth. According to WHO assessment in some African countries maternal mortality ratio makes up 1,000-1,800 per 100 thousand of livebirths<sup>55</sup>. In terms of maternal mortality the Republic of Kazakhstan takes the mean place in the world. Though MMR is much lower in Kazakhstan than in the countries of the world with higher mortality ratios it is still 4-10 times higher there than in the countries with higher human development index (Western Europe, USA, Canada and Japan).

According to data of the Ministry of Health, MMR registered in Kazakhstan in 2005 and 2006 did not show a statistically significant trend toward change. Since 2000 the given indicator has been within the range from 37 (minimum – 2004) to 61 (maximum – 2000) per 100 thousand livebirths (Graph 5.1.). During the last 7 years 100 and more women died every year from causes related to pregnancy and childbirth. The country has failed to reduce maternal mortality to 16 per 100 thousand livebirths, regardless of the political commitment of the Government. Out of the countries comparable to Kazakhstan in terms of gross national product per capita considerably lower ratios of maternal mortality are registered in Bulgaria, Georgia, Costa Rica, Lithuania, Mauritius, Macedonia, Moldova, Slovakia and etc., which indicates the presence of economic reserves for maternal mortality reduction in the country.

Comparison of MMR, which everywhere makes up a hundredth of a percent, by the regions of Kazakhstan in the space of a limited period of time makes no sense. Under rather low values of this indicator the probability that their differences in different regions are determined by random factors is quite considerable. Each registered case of maternal death may introduce tangible corrections into MMR. It is known that in order to use MMR as a health indicator it is preferable that MMR should be based on

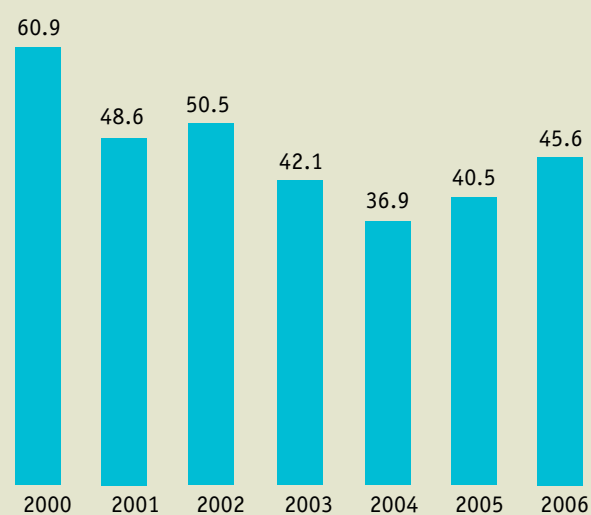
the study of not less than 50 cases, which is not characteristic for any of the regions.

At the same time to further reduce maternal mortality in countries where it is already relatively low, including Kazakhstan, it is necessary to carefully identify its main causes. To determine these forces, detailed knowledge about the causes of maternal mortality in each administrative-territorial unit and in each health organisation is necessary. WHO recommends addressing this issue by way of analysis of not only death cases but all other cases in which there emerge real risk of such outcomes, suggesting introduction of confidential audit methodology<sup>56</sup>.

This methodology implementation implies systematic data collection via filling in questionnaires related to all the life-threatening conditions ever encountered in maternity hospitals. Such conditions are more frequent compared to lethal cases, which determine the increase of the number of observations and they are

**Graph 5.1.**

Maternal mortality ratios in the Republic of Kazakhstan per 100,000 live births in 2000-2006



Source: Ministry of Health

<sup>55</sup> The World Health Report 2005: Make every mother and child count, World Health Organization, 2006

<sup>56</sup> Beyond the numbers, World Health Organization, Geneva, 2004

quite enough to identify regularity. Data obtained this way are analyzed and used for the implementation of measures targeted at risk reduction in case of life-threatening conditions, which at the same time ensure mortality decrease. Unfortunately in Kazakhstan this type of audit has not been introduced so far, which does not make it possible to undertake timely targeted maternal mortality reduction measures.

When analyzing maternal mortality it should be remembered that its registration is knowingly incomplete. In 2006 the Agency for Statistics of the Republic of Kazakhstan carried out a cluster survey in the course of which 38.8 thousand adult household members were interviewed with the use of the sisterhood mortality estimation method<sup>57</sup> (respondents have been asked questions about how many of their sisters reached the age of 15, how many of them died and whether any of them were pregnant at the time of death). According to this survey data, estimated MMR during the

last 10-12 years made up 70 per 100,000 live-births, given 10% of sampling error, somewhat exceeded the average annual MMR during the last 12 years. Not all the maternal mortality cases meet WHO definition. For example, death of a pregnant woman as a result of an accident not meeting the definition of maternal mortality may be due to violence against women, including violence related to her pregnancy under the pressure of social-cultural factors and the cultural environment. Besides that, a certain share of maternal deaths (up to 10%<sup>58</sup>) happens after 42 days from the termination of pregnancy. And finally, due to different reasons data pertaining to maternal mortality can be underreported.

Given the aforementioned it would be of interest to analyze not the available data pertaining to annual MMR variations, which in many cases could be occasional, but the structure of maternal mortality that could be both preventable and difficult to prevent based on the present day development of medical technology.

## Causes of maternal mortality in Kazakhstan

The structure of maternal mortality in the Republic of Kazakhstan is presented in Graph 5.2. Cases of maternal mortality are subdivided into two groups: 1) death cases determined by direct obstetric causes, i.e., pregnancy related obstetric complications and mistakes in management of women in antepartum, intrapartum and postpartum periods; 2) death cases caused by indirect obstetric causes, i.e., illness or disease in the history that was exacerbated during pregnancy or illness that developed in pregnancy and was aggravated by the physiological impact of pregnancy. As is obvious from Graph 5.2, dominating in the country are cases of maternal mortality determined by direct obstetric causes.

Like in the period from 2001 to 2003, obstetric haemorrhages were the main causes of maternal deaths in 2004-2006 and were responsible for almost one third of all the cases of maternal

death in the Republic. It is significant that MMR from haemorrhages in women from rural areas in 2005 and 2006 was twice as high as in urban areas (16.0 and 21.0 against 6.7 and 11.2 respectively, which illustrates an inadequate level of obstetric care in rural territories. Death of almost 1/6 of women resulted from gestosis, and in 1/7 of cases from abortions. Thus, death in 58.6% of deceased mothers was linked with three aforementioned obstetric causes, each of which is preventable today provided a woman gets adequate care. Deaths caused by indirect obstetric reasons (severe internal diseases as a rule) made up 17% within the structure of maternal mortality in 2004-2006.

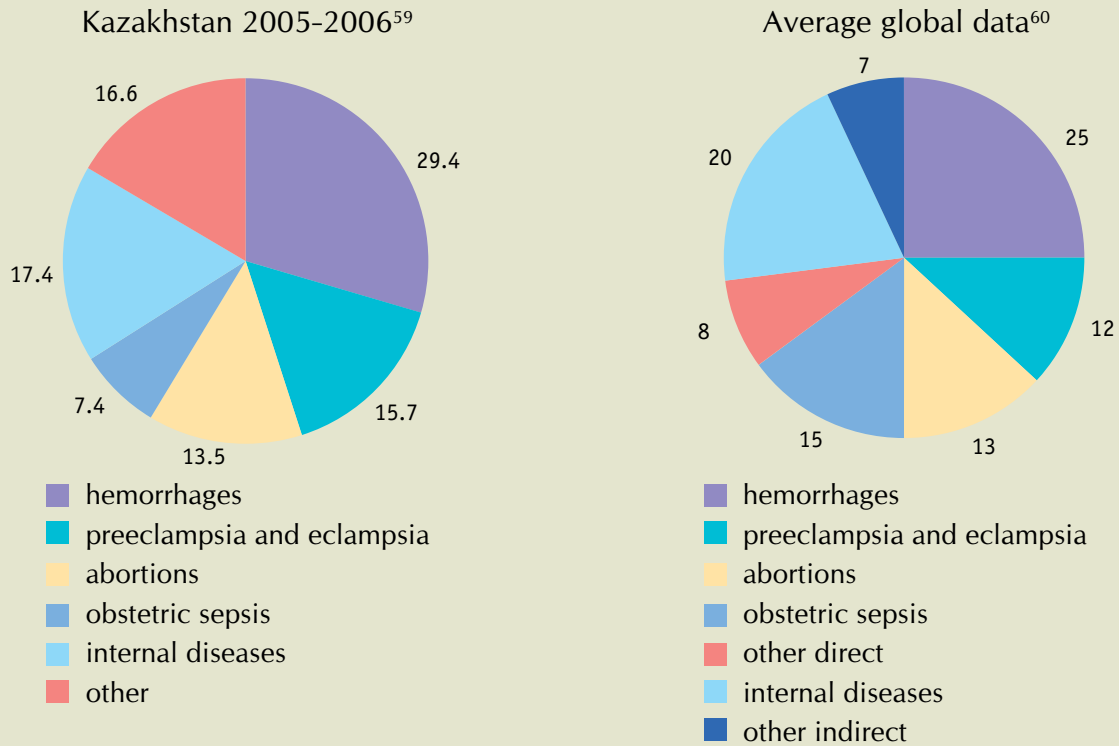
The structure of registered maternal mortality in Kazakhstan does not have principle differences from the world average with the exception of comparatively fewer post-partum infections. Currently almost 100% of women

<sup>57</sup> The sisterhood method for estimating maternal mortality: Guidance notes for potential users, World Health Organization, 1997.

<sup>58</sup> Koonin L. M., Atrash H K., Rochat R. W., Smith J. C. Maternal Mortality Surveillance, United States, 1980-1985 Incidence and Mortality Weekly Report, 1988, Vol. 37, No SS-5, P.19-29

### Graph 5.2.

Maternal mortality structure in the Republic of Kazakhstan in 2004-2006, %



in Kazakhstan give birth in maternity hospitals that maintain sanitary regimes. As is the case worldwide, haemorrhages, gestoses and abortions are leading causes of maternal mortality in Kazakhstan. In countries with a high human development index mothers die 4-10 times less

often than in Kazakhstan mostly for reasons that are very difficult to prevent, specifically thrombotic complications and amniotic fluid related embolism. In other words, Kazakhstan keeps on losing mothers whose deaths could have been prevented.

<sup>59</sup> Analysis of the causes of death among pregnant women, women in labor and birth in the Republic of Kazakhstan in 2006, Almaty, Research Center of Obstetrics, Gynecology and Perinatology, 2007

<sup>60</sup> The World Health Report 2005: Make every mother and child count, World Health Organization, 2006

# Status of evidence-based methods which could be used to achieve progress in maternal mortality reduction

## Regionalization

It is generally recognized that the majority of maternal deaths could be prevented through ensuring women access to quality services for family planning, qualified health care during pregnancy and labour and adequate care in the post-partum period. A key to saving the life of women is an adequate health system.

In Kazakhstan MMR in the urban and rural areas differs considerably. In urban areas in 2004, 2005 and 2006 the MMR was 30.3, 27.5 and 38.0 respectively, while in the rural areas it made up 50.8, 58.2 and 56.4 per 100,000 livebirths. In other words, it was about 1.5 times higher. This is quite in agreement with the availability of better quality health services in urban areas. No doubt if women in rural areas had the same access to health services as women in urban locales then maternal mortality could be reduced significantly under the existing supply of reproductive health and obstetric care services.

Global experience shows that in order to resolve the issue of rural population access to services a regionalization strategy should be implemented. Regionalization implies a distribution of maternity hospitals of different levels, depending upon the complexity of health care. First level maternity hospitals should assist women in delivery in case of an uncomplicated pregnancy. Second level maternity hospitals need to be provided with adequate equipment and high level health professionals to ensure performance of full-scale surgical interventions in case of necessity, including indications for urgent interventions. Some health facilities may provide specialized medical aid in the most complicated cases.

The principle of regionalization makes it possible to refer pregnant women of high-risk groups to higher level health facilities in a timely manner. Urgent visits for consultations, on-site medical aid or transportation to higher level facilities should be done any time of the day and year. To

be more effective, obstetric care regionalization should not necessarily coincide with administrative regional borders. A woman in need of medical aid should use the services of the nearest necessary level health facility.

According to the data of expert analysts in 2004-2006, of all the pregnant women, women in labour and women in delivery that died in the Republic of Kazakhstan, 34.0% died at the primary level, 40.0% at the second, 20.0% at the third and 6% at home. However, when the principle of regionalization has been followed 1.0% of women that died were subject to delivery at the primary level; 23% at the second level; 76.0% at the third level. Regionalization could help us to prevent not less than half of the lethal cases<sup>61</sup>.

Implementation of the principle of regionalization requires urgently addressing at least two problems: the refusal from mandatory linkage of obstetric care provisions to the residence region of a woman (which probably will require the change in financing health facilities that provide services to mothers) and the motivation of mothers to make use of the regionalization model. Expert analysis revealed that women from rural areas with chronic conditions that get aggravated due to pregnancy or whose pregnancy is complicated refuse hospitalization in health facilities of the second or third level in the antenatal period. Major reasons of such behaviour are: lack of money for travelling to the health facility, impossibility of leaving children and household behind and lack of possibility to be visited by husbands and relatives. Unfortunately, mention should be made that as of now there are no necessary conditions for the implementation of the regionalization principle.

## Human resources

Kazakhstan is a country with one of the lowest population density in the world. This naturally results in the need for obstetrician-gynaecolo-

<sup>61</sup> Papers of the National Center of Obstetrics, Gynecology and Perinatology of the Ministry of Health of the Republic of Kazakhstan

gists that would ensure adequate access of women to health care. Early and regular perinatal care makes a positive impact upon the health of both mother and child.

Meanwhile, the density of obstetrician-gynaecologists in Kazakhstan keeps on shrinking. In 2000 the ratio obstetrician-gynaecologist/pregnant woman and woman in labour made up 1/150 and in 2006 1/240. The profession of an obstetrician-gynaecologist is no longer

attractive. The average age of obstetrician-gynaecologists in the country is 46<sup>62</sup>. According to data of expert appraisals the unwillingness of students and young doctors to join the pool of obstetrician-gynaecologists, especially in rural areas, is due to low wages, poor social conditions and also sanctions for the inconsistency between achieved mother and child health indices and planned ones, though health indices do not always depend upon doctors.

## Health care quality. Accessibility of state-of-the-art medical technologies and drugs

### Management of obstetric haemorrhages

As it has been stated before, haemorrhages constitute a major reason of maternal mortality in Kazakhstan. Analysis shows that death from haemorrhages is determined by the fact that hospitals are not prepared to provide emergency care, by non-observance of evidence-based algorithms of health care services in case of obstetric haemorrhages, by incorrect conservative haemostatic measures, low surgery activities of obstetricians-gynaecologists and mistakes of anaesthetic and resuscitation measures.

Reduction of maternal losses due to this reason depends to a great extent upon the introduction of effective technologies for the prevention and management of obstetric haemorrhages, enhancement of the material and technical basis of in-patient health facilities, and ensuring the necessary stock of blood and blood substitutes, including an inexhaustible supply of blood-coagulation factor VII are made available in each maternity health facility. Currently problems of supply in maternity hospitals with safe drugs and blood components are not completely resolved.

### Management of gestoses

As of today prediction of gestoses in pregnant women does not seem to be a resolvable problem. That is why major focus should be placed

on adequate management of pregnant women with gestosis, which includes timely diagnostics and delivery in line with evidence-based clinical protocols. Evidence-based interventions that ensure arterial hypertension control in pregnant women consist of the prescription of such anti-hypertensive drugs as hydralazine and labetalol. Hydralazine is the drug of choice for eclampsia, under which mechanism arterial hypertension development is different. Labetalol has a different mechanism of action compared to hydralazine and ensures quick and reliable anti-hypertensive effect, which has been proven effective for eclampsia. These drugs, which are not very expensive, have not been registered in Kazakhstan. Hence, they are not used and are not in the list of essential drugs. Lack of necessary drugs may result in the deterioration of the gestosis forecast.

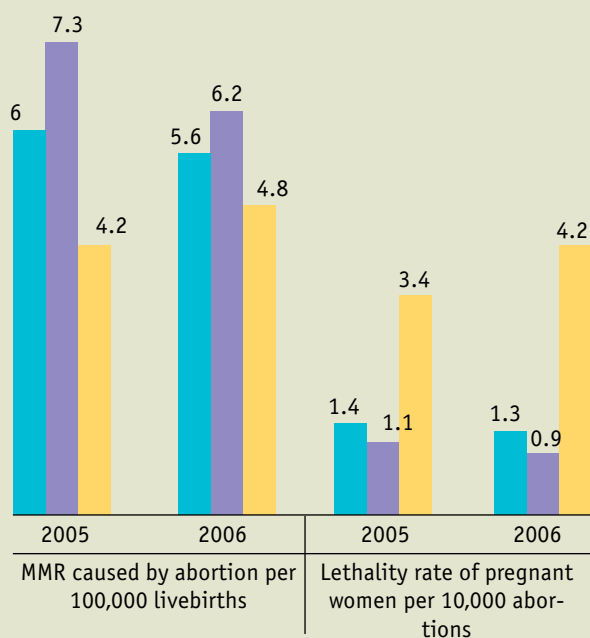
### Contraceptives and abortions

Regardless of the promotion of contraceptives, abortion in Kazakhstan is still one of the major family planning methods. In 2006 more than 130.5 thousand abortions in the country were registered (in 2005 – more than 125.6), of which medical abortions (up to 12 weeks of pregnancy and mini-abortions) made up more than 70%. Pursuant to registration data one out of three pregnancies ended in abortions. The registered number of induced abortions in Kazakhstan has a long trend of decreasing. However, the given frequency of abortions

<sup>62</sup> Papers of the National Center of Obstetrics, Gynecology and Perinatology of the Ministry of Health of the Republic of Kazakhstan

**Graph 5.3.<sup>66</sup>**

Maternal mortality ratio caused by abortion and lethality rate of pregnant women from abortion per 10,000 of abortions



■ Kazakhstan  
 ■ Urban area  
 ■ Rural area

Source: Based on the data of the Research Center of Obstetrics, Gynecology and Perinatology of the Ministry of Health of the Republic of Kazakhstan

registered in the country exceeds by threefold the frequency of abortions in the countries of the European Union. The real situation in this area is not quite clear, given that according to expert appraisal, formal information about abortions could be considerably underreported. The growing network of private as well as public health facilities and obstetrician-gynaecologists performing abortions get informal remuneration from the clients, sometimes for anonymity.

Many countries of the world reduce the number

of abortions through health education and introduction of advanced contraceptive technologies<sup>63</sup>. The point of view that introduction of contraceptives leads to a would-be birth ratio reduction is erroneous, given that women make decisions on unwanted pregnancy termination by way of abortion. Limitations with regard to induced abortion entail only the deterioration of access by pregnant women to medical aid, growing migration of such women to countries where abortions are legalized and increase of the frequency of the most dangerous illegal abortions.

At the same time, the reduction of the number of abortions undoubtedly could be a way to bring down the maternal mortality ratio given that abortion is one of its major causes in Kazakhstan. Based on the formal statistics, the frequency of complications (including uterine perforation, haemorrhages and infections) caused by abortion in the country on the whole in 2006 made up 1%. In the rural area the incidence of post-abortion complications in 2006 made up 1.5% while in the urban area 0.9%.

Data on MMR determined by abortions is given in Graph 5.3. Compared to a previous two-year period, MMR has not undergone considerable dynamic change. Higher MMR determined by abortion in urban areas depends on a greater number of abortions performed in the cities (about 90%). At the same time, abortions performed in rural areas are more dangerous, which most probably is due to the inadequate qualifications of personnel and inadequate sanitary conditions. The abortion-induced mortality ratio among pregnant women in rural areas is 3-4 times higher than the ratio in urban areas.

Out of the total number of abortions in 2005 and 2006, adolescents of 15-18 years of age account for 5%, which is in compliance with their share within the structure of the reproductive population. However, taking into account the fact that only a percentage of adolescents have sex it is possible to conclude that abortion frequency among sexually active adolescents is higher than among the adult population.

<sup>63</sup> WHO definition of modern contraceptive technologies includes: female and male sterilization, injective and oral hormonal drugs, intrauterine devices (loops), diaphragms, spermicides and condoms.

## Control of indirect causes of maternal mortality: extragenital diseases

MMR determined by extragenital diseases in 2006 in Kazakhstan made up 9.6 (2005 – 4.3) per 100 thousand livebirths and has not developed clear dynamics since 2001. Among diseases that have led to maternal death, the following have been registered: rheumatic diseases complicated by heart diseases and tumours. Outcomes of the analysis show that maternal mortality resulted from extragenital pathologies that could have been prevented in the majority of cases under timely detection and hospitalization of pregnant women. One factor negatively influencing pregnancy development is the wide prevalence of iodine-deficient anaemia, which is registered in almost 60% of pregnant women and requires correction.

According to statistic data 97.3% and 96.1% of women in the Republic of Kazakhstan with a terminated pregnancy in 2005 and 2006 have been examined by a physician. Antenatal clinics registered respectively 71.7% and 72.3% of women with pregnancy terms up to 12 weeks. This high coverage rate, however, has not resulted in positive maternal mortality dynamics, which indicates the necessity of bring up the quality of perinatal care.

## Issues of parity of delivery and maternal mortality structure depending upon the gestational age

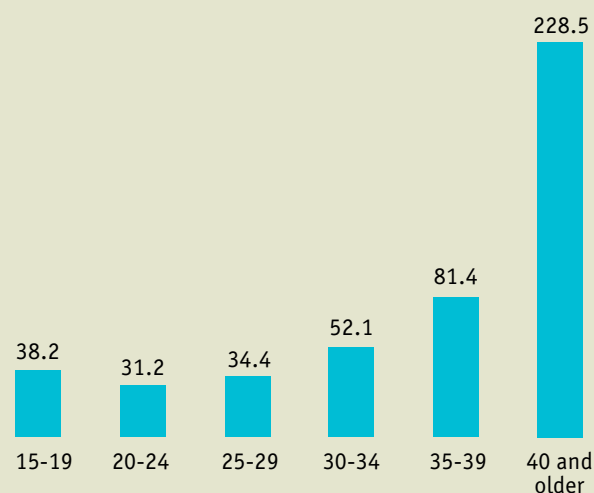
When speaking about maternal mortality prevention, the age of a pregnant women and gestational age should be given serious attention. Graph 5.4. shows that the risk of maternal mortality in Kazakhstan in women above 30 years of age gets higher and makes up 0.2% in women above 40 years of age.

Control of maternal mortality determined by age factors and gestation period as well as by many other aspects of maternal mortality control is closely integrated with reproductive health care. The probability of the mother's death also logically increases with the increase of gestational age. Graph 5.5. shows the proportion of mothers that died at different gestational terms.

<sup>64</sup> Ibid

**Graph 5.4.**

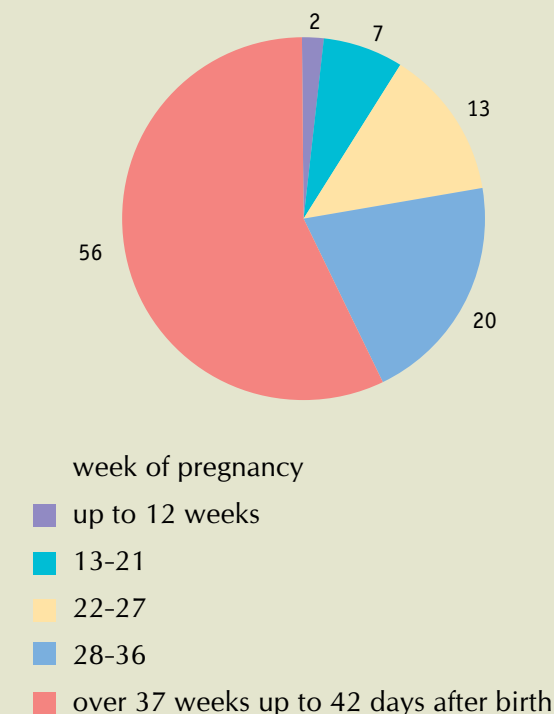
Dependence of maternal mortality ratio upon mother's age



Source: National Centre for Obstetrics, Gynaecology and Perinatology of the Ministry of Health of the Republic of Kazakhstan

**Graph 5.5.<sup>64</sup>**

Structure of maternal mortality depending upon gestational age



## Reproductive health

The status of reproductive health of women is a crucial factor determining maternal mortality. As is well known, reproductive health services in a wide sense of the word include a broad range of programmes and among them are the following:

- ♦ Counselling, raising the awareness, training, communication and clinical services on family planning issues;
- ♦ Safe motherhood promotion, including antenatal care, safe pregnancy and birth;
- ♦ Mother and child care in the postnatal period;
- ♦ Prevention and treatment of sexually transmitted infections, including HIV;
- ♦ Provision of treatment services for gynaecological diseases.

At the same time, indicators of reproductive health of women in Kazakhstan do not improve considerably. According to a multi-indicator cluster survey implemented by the Agency for Statistics of the Republic of Kazakhstan, in the course of which 7,200 respondents (women from rural and urban areas of all the country regions) were interviewed, 49% (out of 37% of women in West-Kazakhstan oblast to 73% of women in South-Kazakhstan oblast married or having a sexual partner) do not use any method of contraception, which is a concern considering the high rate of abortion. Modern contraceptive technology methods were used only by 49% of those interviewed (from 36% in Almaty oblast to 60% in Astana city). Three-fourths of interviewed women that make use of modern contraceptive methods choose intrauterine devices regardless contraindications. Out of 121 adolescents of 15–19 years of age 68% did not use any contraceptive method.

At the same time, 99.9% of interviewed women that gave birth in the course of two years before the survey (in total 1,719 people) got antenatal care at least one that included measuring arterial pressure, weighing, doing a blood

and urine test and attendance at the birth by a qualified specialist: doctor or a midwife (89 and 81% respectively). Thus, currently the issue of ensuring safe motherhood through bringing up the quality of health services is the most urgent, though the issue of a formal aid provision to women on the part of certified specialists is still on the agenda.

At the same time problems of ensuring adequate awareness of women on family planning and decision making pertaining to pregnancy or the use of different contraceptive technologies are not yet resolved. Women of childbearing age, especially young women between 15–24 years old, are not adequately informed about HIV prevention. Only 22% and 23% out of those interviewed at the age of 15–19 (total 2,469) and 20–24 (total 2,108) were able to name two methods of HIV infection prevention and correctly identify three myths related to virus transmission<sup>65</sup>.

At the same time HIV infection in the country is growing, so that in 2006 in the course of sentinel epidemiological surveillance implemented with the support of CDC, HIV prevalence was determined as making up 0.05% among randomized sampling of pregnant women (total number of surveyed made up 6,405 people in 22 biggest cities of Kazakhstan). The epidemic of sexually transmitted infections (STI) is still there. Syphilis prevalence among pregnant women within the same sampling made up 3.3%, including in Karaganda 8%: 15% of pregnant women reported the presence of at least one of the symptoms of sexually transmitted infections<sup>66</sup>.

Mention should be made that surveillance over the first time of registered cases of syphilis in STI clinics (incidence) and correlation of them with the total population number, as it is normally done and is used as a basis for health statistics in Kazakhstan, reveals a trend toward decreasing the epidemic. And vice versa, results of the surveillance over syphilis prevalence in randomized samplings in sentinel population

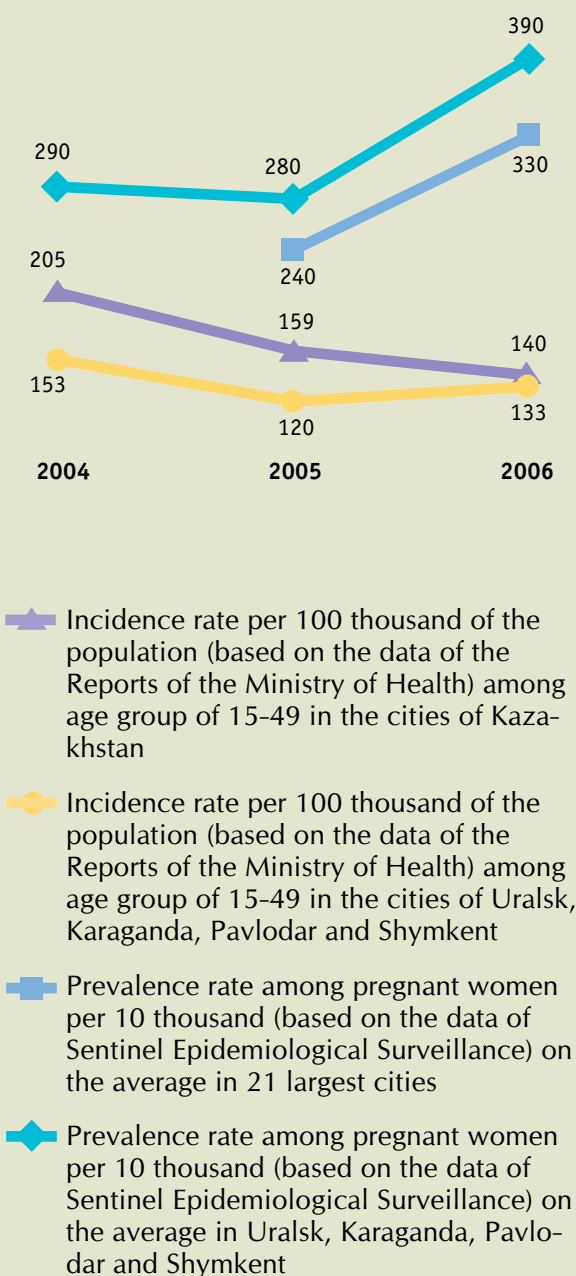
<sup>65</sup> Multi-indicator Cluster Survey. The Agency for Statistics of the Republic of Kazakhstan, 2006

<sup>66</sup> Sentinel Epidemiological HIV Surveillance, Republican AIDS center, 2006



**Graph 5.6.**

Dynamics of syphilis incidence<sup>67</sup> and prevalence<sup>68</sup> rates in the Republic of Kazakhstan



groups (specifically pregnant women) manifests a growing serious epidemic (Graph 5.6.). Sentinel epidemiological surveillance can be logically extrapolated to all of the sexually active population.

The study of syphilis prevalence is based on detection of anti-bodies to its agent, which quickly disappear after the disappearance of the infectious agent (*Treponema palladium*) in response to treatment. That is why real syphilis incidence and prevalence of antibodies to its agent may be quite close. In fact, as is shown in Graph 5.6., these rates have changed since 2004 at least 20 times (!), and the difference between them kept on increasing from year to year. This implies that only 5-10% of the real number of syphilis cases are registered by STI services. The majority of these infection cases, obviously, are not detected and probably are not treated.

Syphilis is an indicator of STI, given that in contrast to more than 10 other STI infections<sup>69</sup> systematically registered in Kazakhstan, it is easily diagnosed correctly with the help of blood tests. The syphilis epidemic gives grounds to assume the presence of other epidemics and other curable STI that are not detected by the existing epidemiological surveillance system. A high prevalence rate of curable STI, including syphilis, reflects poor access of the population to treatment for these infections.

It should be stated that methods used in the country to manage STI are still different from evidence-based WHO clinical protocols, and STI management is not integrated into the reproductive health service. Meanwhile, STI represent one of the leading causes of miscarriages in pregnant women, pathologies on the mother and child's parts and bring up the susceptibility of people to HIV.

While for a number of years the Government in its documents has recognized the urgency of the problem<sup>70</sup> related to STI prevalence in

<sup>67</sup> Data of the Ministry of Health

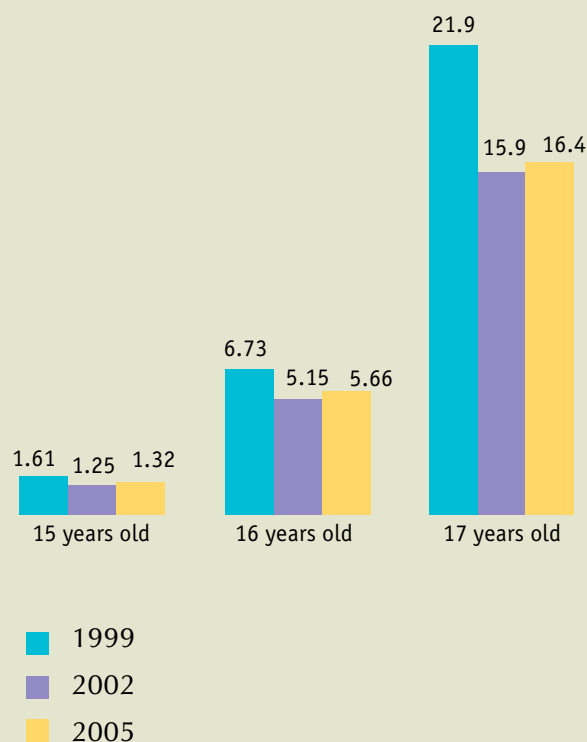
<sup>68</sup> Sentinel Epidemiological Surveillance over HIV, Republican Center on AIDS control and prevention, 2006

<sup>69</sup> Besides syphilis anogenital herpes, gonorrhea, urogenital chlamydiosis, trichomoniasis, mycoplasmal infections and other STI are spread in Kazakhstan

<sup>70</sup> AIDS control Programme in the Republic of Kazakhstan for 2006-2010 is endorsed by the Decree of the Government of October 14, 2001, № 1207; AIDS Epidemic Control Programme in the Republic of Kazakhstan for 2006-2010 is endorsed by the Decree of the Government of December 12, 2006, № 2016

**Graph 5.7.<sup>71</sup>**

Dynamics of giving birth by adolescents (per 1,000 of women of the given age) in the Republic of Kazakhstan



the country, no effective evidence-based steps toward reduction of epidemics have been done so far. The type of medical aid attractive to women and adolescents vulnerable to STI (friendly approach, anonymity, free, in case of necessity treatment prescription at the time of address in the out-patient environment within a wide scope of health facilities and first of all in reproductive health facilities) is not actually ensured.

Access to contraceptives in the Republic is still inadequate. The National List of major drugs (essential drug list) includes only two hormonal contraceptives, which implies a limitation of choice. Contraceptives are not included into the list of free drugs or the drugs that are released with discount (on preferential terms). The strategy regarding the safety of reproductive health goods has not been implemented. Poor access of adolescents to contraceptives and youth-friendly health services is manifested in «static» indicators of birth ratio among adolescents (Graph 5.7.).

No research has been done in the country pertaining to unmet needs in family planning.

According to the formal registration data, however, one third of pregnancies end up in abortion and this fact speaks for itself.

<sup>71</sup> Ethnographic Yearbook of Kazakhstan, Almaty, 2006

## CONCLUSION

In the space of 2.5 years that have passed since the publication of the analysis of the progress made in achieving Millennium Development Goals by Kazakhstan, no considerable progress has been made with regard to reduction of maternal mortality ratio and ensuring universal access to reproductive services and goods. Given that to reduce maternal mortality after it has achieved a relatively low threshold level (which is the case in the country) is very difficult, and in the absence of significant dynamics of key indicators it is hardly probable that the maternal mortality ratio of 14 per 100,000 livebirths will be achieved.

There is a political commitment to mother and child health care, which is viewed as a priority by the Government. Urgent practical steps are necessary to implement this commitment. First of all the country needs a detailed reproductive health strategy that would include financial liabilities of the Government regarding its implementation, and possibly donor organisations.

With a purpose of mobilizing financial resources, sufficient for providing access to qualitative reproductive health commodities and services of enough high threshold for all, who need it, probably it is necessary to reconsider a parity of funds allocated for capital construction of expensive sublime establishments and funds directly allocated for reproductive health care.

Given the existing structure of maternal mortality priority directions, the following should take place to ensure its reduction:

- ♦ Bring up the effectiveness of maternal mortality analysis and adequacy of response measures to life-threatening conditions, achieved through confidential audit;
- ♦ Setting up a working model of regionalization of services, which will allow improving access to qualified health care of mothers in need, including full-fledged emergency medical aid. This model contributes to lethality reduction from obstetric haemorrhages, gestosis and extragenital diseases;
- ♦ Considerable improvement of the technical capacity of doctors and midwives that provide medical aid to pregnant women, those in labour and in birth concerning all aspects of reproductive health;
- ♦ Ensuring adequate material and technical as well as drug supply for maternity hospitals, including drugs for management of haemorrhages and gestosis, whose effectiveness has been proved by global experience;
- ♦ Wide scale promotion of advanced contraceptive technologies, creation of conditions in which women will have access to contraceptives (ensuring wide range of accessible contraceptives as well as their affordability), which will reduce the number of abortions and therefore maternal mortality due to abortions.

Access to youth-friendly reproductive services and goods should be guaranteed to young people, including adolescents. Urgent measures should be undertaken to control HIV and STI epidemics (access to prevention, diagnostics and effective management following evidence-based medicine and on terms appropriate for the client, which ideally have to include anonymity, free use and proximity of services).

# MDG 6. COMBAT HIV/ AIDS AND TUBERCULOSIS

## Target 7. Halt by 2015 and begin to reverse the spread of HIV/ AIDS

### Relevance for Kazakhstan

Over the course of more than 20 years, the HIV epidemic has been an issue of great concern for the entire global community. According to the estimates of experts in 2006, the number of people living with HIV was estimated at 40 million. In 2006 almost 5 million people were infected with HIV and the very same year 3 million people died due to the related epidemic.

Global experience shows that timely and effective measures may restrain infection spread, while an uncontrolled HIV epidemic spread may have a destructive effect upon the health of the population and the socio-economic development of the country. The HIV epidemic among reproductive age and economically active population groups may entail the following consequences in the countries of Eastern Europe and Central Asia<sup>72</sup>.

- ♦ Rates of economic growth may go down by 0.5-1.0% a year.
- ♦ Public health expenditures for medical aid to HIV patients may increase by 1-3%.



- ♦ The proportion of the dependent population may increase, which may have a negative impact on the system of social protection, especially in the countries that already experience a decline of general fertility indicators (number of births per a woman), for example, in Belorussia, Estonia, Moldova and the Russian Federation.
- ♦ The size and composition of families may change. It is possible that one-parent families and families in which grandparents bring up orphans may grow in number. This trend will increase vulnerability of families, and may have a negative impact upon the relationships between family members that belong to different generations given that children will drop out of school to earn money or to take care of their siblings, which will be an additional contribution to poverty growth.

The Republic of Kazakhstan succeeds in maintaining the epidemic at the initial/concentrated

<sup>72</sup> Adeyi O. et al. Averting AIDS Crises in Eastern Europe and Central Asia – A Regional support strategy. Washington, DC, the World Bank. 2003.

stage (HIV is basically concentrated among injection drug users, sex workers). However, the possibility for the situation to develop in line with the worst scenario is great, given that the behaviour of risk groups including injection drug users as well as sex workers is not safe, awareness of young people on HIV transmission modes and ways to prevent infection is inadequate, and safe behaviour in terms of HIV infection is not always practiced.

The Government of the Republic of Kazakhstan recognizes the gravity of the problem and necessity to combat the epidemic and manifests its commitment to international goals and strategies. The Republic of Kazakhstan was one of the 189 countries that participated in the Special Session of the UN General Assembly on HIV/AIDS in 2001. At this Session heads of states endorsed the Declaration of Commitment on HIV/AIDS recognizing that the «global AIDS epidemic, which has already reached a terrifying scope with devastating effects, is a global emergency ... and is of concern to all the society strata»<sup>73</sup>. The Declaration on Commitment includes 10 priority areas, including leadership, prevention, treatment, care and support, reduction of vulnerability, children-orphans, and reduction of the social and economic burden of the epidemic, research and development, HIV in the regions of conflict and disaster, and resource mobilization. This Declaration is a milestone on the way to Millennium Development Goals – «have halted by 2015 and begun to reverse the spread of HIV/AIDS». The

Republic of Kazakhstan implements the given strategy based on the commitments made in 2005 at the Group of Eight summit in Gleneagles regarding the assistance to countries in achieving goals of ensuring universal access to HIV prevention, treatment, care and support by 2010.

On top of international commitments, the AIDS Programme for 2006-2010 has been endorsed and is being implemented in Kazakhstan, and issues of HIV and AIDS are integrated into the section on social policy of the Plan for the Strategic Development of Kazakhstan as of 2010. Combating the epidemic is also an important part of the National Programme of Health Sector Reforming and Development for 2005-2010.

Progress in achieving this target is assessed based on the following indicators:

- ♦ Percentage of women and men aged 15-49 who had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse
- ♦ Percentage of women and men aged 15-49 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission
- ♦ Percentage of injecting drug users who are HIV infected
- ♦ Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they had an injection

## Situation assessment in Kazakhstan

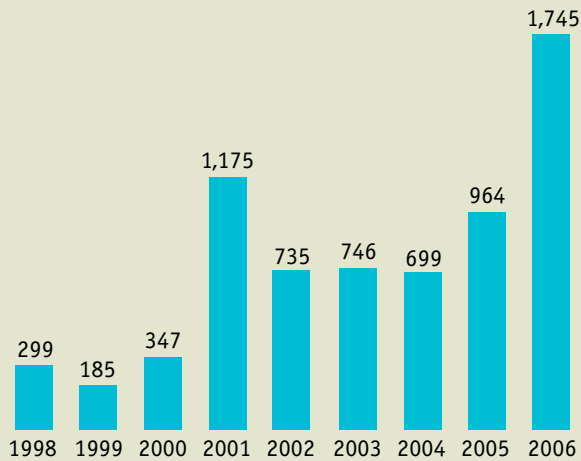
The first case of HIV infection in Kazakhstan was registered in 1987. Since that time and as of July 1, 2007, in other words during the period of 20 years since the first HIV case detection, 8,388 people living with HIV have been registered in Kazakhstan, 558 have been diagnosed with AIDS, including 23 children. 453 people died of AIDS including 3 children less than 14 years of age.

According to estimates the number of people living with HIV in Kazakhstan makes up 16,000, which is almost twice as high as the number of registered cases. Dynamics of registration of detected HIV cases is characterized by sustainable growth of the number of new detected cases. Thus, as of 2005, the number of registered cases exceeded the number of those detected in 2004 by 1.4 (964 and 699,

<sup>73</sup> Declaration of Commitment on HIV/AIDS. United Nation General Assembly Special Session on HIV/AIDS. 25-27 June 2001. United Nations.

**Graph 6.1.**

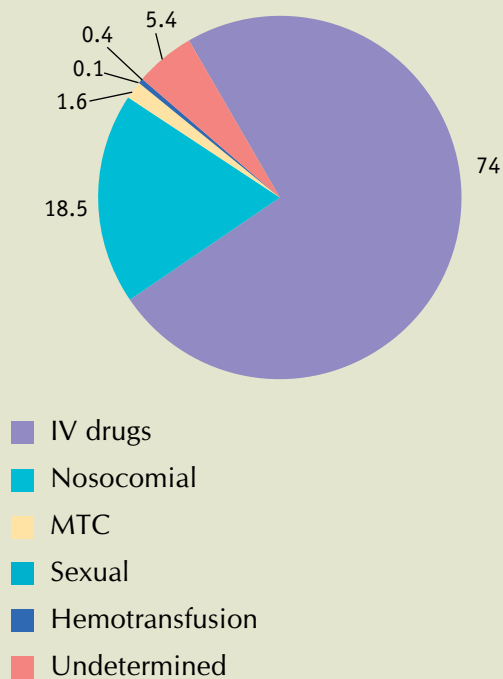
Number of new HIV cases registered in Kazakhstan



Source: Data of the Republican AIDS centre.

**Graph 6.2.**

Cases of HIV infection distributed by transmission ways (in %, cumulative data as of the end of 2006)



Source: Data of the Republican AIDS centre.

respectively); in 2006 their number was almost twofold higher compared to 2005 (1,745 and 964, respectively) (Graph 6.1.). 988 new cases of HIV were registered during only six months of 2006.

Cases of HIV are registered in all the 14 oblasts of the Republic of Kazakhstan. The most affected oblasts are Pavlodar, Karaganda and Almaty city, which account for 60% of all the registered cases. Special attention should be given to the South-Kazakhstan oblast, in which a nosocomial HIV outbreak was registered in 2006 in several paediatric hospitals. The cause of this nosocomial HIV infection dissemination was violation of safe blood transfusion rules and sanitary-epidemiological regimes in hospitals. The number of affected children made up 114.

Basically, the HIV epidemic in Kazakhstan spreads among injection drug users. They make up 74% of all the HIV cases detected (Graph 6.2.).

The heterosexual transmission rate is growing, making up 16.5% in 2006 while in 2001 it was 5%. Out of the total number of people living with HIV, males make up 75%. However the number of women with HIV keeps on growing and the majority of them have been infected by their sex partners – injection drug users (in 2001 the proportion of women made up 10%, while in 2007 already 26%). 296 babies were born to HIV women and HIV infection is confirmed in 21 children. A specific feature of this epidemic is that it has affected young people most of all. Young people between the ages of 20-29 account for 50% of people living with HIV in Kazakhstan; mention should be made that 72% of people living with HIV neither study nor work. 30% out of the total number of those registered have been detected in penitentiary institutions.

50% of those in need were exposed to antiretroviral therapy in 2007 (352 out of 700). All pregnant women identified as HIV positive were subject to full-fledged prophylaxis of HIV transmission from mother to child. All the children born to mothers with HIV were on formula-based feeding.

## Situational analysis in different groups and identification of important problems

### Injection drug users

Injection drug users remain the principal driving force of the HIV epidemic in Kazakhstan. The estimated number of this group is 140,000 people, which is a manifestation of the fact that 2% of the population between the ages of 18–49 inject drugs. The reason for such wide spread drug use may be the fact that Kazakhstan is at the crossroads of the transportation of opiates from Afghanistan to Europe. According to survey data, 80% of drug users inject heroin and 16% use “khanka”. HIV dissemination prevention in this vulnerable group has always been a priority for the Government of Kazakhstan. Since 2001, programmes of “Harm Reduction” have been integrated into the national policy and are a part of national AIDS programmes.

According to the data of sentinel epidemiological surveillance implemented in Kazakhstan in 2006, HIV prevalence among injection drug users was 3.4%, which is in compliance with the level of 2005. Based on the data of the behavioural survey, 47% of drug users know about modes of transmission and have correct knowledge about HIV prevention; however, only 14% of this group practice safe injection and sex behaviour. This is confirmed by high prevalence of Hepatitis C virus (64.5%) and syphilis (11.1%).<sup>74</sup>

As is obvious from the data, potential for further HIV dissemination in this group is high. And the fact that this group is a sort of «bridge» of HIV transmission to the general population determines its extremely significant role in the epidemiological process.

### Sex workers

According to the estimates of the Republican AIDS Centre of Kazakhstan the number of women providing sexual services for money makes up 20,000. Based on the data of epidemiological surveillance, HIV prevalence in

this group makes up 2.5%, syphilis prevalence 26.2%, and Hepatitis C prevalence 17.3%. At this prevalence of HIV, Hepatitis C and syphilis is considerably higher among those sex workers that use drugs (5.8%, 67.5% and 35.4%, respectively).

Correct knowledge about HIV transmission and prevention among SW in 2006 made up 58%, which is a proof of knowledge improvement compared to 2005 (39%), though it is still inadequate<sup>75</sup>. Sex workers constitute the population group that historically has been subject to discrimination and stigmatization. Untreated gynaecological and sexually transmitted diseases; unequal authority distribution between sexes whereby women are not always able to control their sexual behaviour (specifically to insist on protected sex with a client) – all make sex workers especially vulnerable to HIV and, consequently, increase the possibility of infection going beyond the limits of this group.

### Prisoners

All over the world HIV prevalence in penitentiary institutions is higher compared to the general population. In Kazakhstan HIV prevalence there, based on sentinel epidemiological surveillance data, makes up 1.0%, while among the general population it is 0.1%. In 2006 syphilis prevalence made 13.6% and Hepatitis C 40.1%. As far as dynamics are concerned, HIV prevalence increased threefold during the 4 year-period, Hepatitis C prevalence increased by 1.3 times compared to that of 2003 and syphilis prevalence by 1.2 times during a two-year period. Accessibility of condoms in the penitentiary institutions of Kazakhstan increased from 66% to 88% during the period from 2005 to 2006. On addition, accessibility of disinfectants in Kazakhstan increased from 80% in 2005 to 89% in 2006. Survey results showed that inmates are well aware of methods of HIV transmission and prophylactic

<sup>74</sup> Results of sentinel epidemiological surveillance in the Republic of Kazakhstan for 2006 presented at the meeting in Almaty on April 9–10, 2007.

<sup>75</sup> Data of sentinel epidemiological surveillance in the Republic of Kazakhstan for 2006 presented at the meeting in Almaty on April 9–10, 2007.

measures; the awareness rate among prisoners made up 64.6%. A rather high prevalence of HIV, Hepatitis C and syphilis among prisoners suggests that safe sex is not practiced in penitentiary institutions, drugs are injected with the use of non-sterile equipment and some of the convicted may already be infected with the aforementioned diseases at the time of imprisonment. Prophylactic measures like awareness raising with regard to HIV and AIDS are implemented in penitentiary institutions, and condoms and disinfectant solutions are distributed there. However, no exchange syringes or needles are provided. Mention should be made that the number of inmates examined for HIV increased from 61% (2005) to 72% (2006)<sup>76</sup>.

### Men having sex with men

In some countries of the world men having sex with men make up one of the population groups most affected by the HIV epidemic. The first case of HIV infection was registered in the USSR in 1987 in a man that had sex with another man and in the course of some few years that followed the epidemic began spreading within this group. According to data of sentinel epidemiological surveillance, HIV prevalence within this group in Kazakhstan made up 0% in the course of 2003-2006, which is in line with the registration data given that HIV prevalence among MSM is really very low. 83% of MSM mentioned the use of condoms during the last anal sex contact. Correct knowledge about HIV made up 54%. The favourable situation with regard to HIV in this group may be determined by the fact that this population group is notable for a high level of education and is interested in health promotion. Besides that, 71% of MSM in Kazakhstan are covered by prophylactic measures and 65% were HIV<sup>77</sup> tested in 2006. However, given that access to this group people is limited partially due to historical stigmatization of sexual relations between men, it is possible that HIV infections have not

been included into the sampling when carrying out sentinel epidemiological surveillance. This may be the reason why the HIV epidemic among this population group is developing insensibly and the true situation may not be as auspicious as it may seem.

### Youth

Regardless the fact that young people became more knowledgeable of prevention measures and their awareness increased from 34% to 39% compared to 2005, sexual behaviour is still risky in terms of HIV infection. Thus, 84% of interviewed students used condoms with irregular partners. In the course of the last 12 months 9.2% of interviewed men reported at least one of the STI symptoms, but only one third of them sought medical aid. The presence of STI symptoms confirms risky sexual behaviour in terms of HIV infection (a large number of sexual partners without the use of condoms)<sup>78</sup>.

### Women

Existing gender stereotypes and differences in the country increase the vulnerability of women to HIV. According to the data of the survey implemented among rural women, initiative in all the spheres, including the sexual one, belongs to men; a husband's adultery is not denounced by the society, violence against women is prevalent in some villages of Kazakhstan, and the initiative on the use of condoms also belongs to men. Women less often get paid jobs compared to men, which reduces their access to health services and the corresponding early diagnosis of diseases<sup>79</sup>.

### People living with HIV

In Kazakhstan there are significant preconditions for stigmatization and discrimination of PLH. A public opinion survey was undertaken in 2006 to assess public awareness, attitudes and practices vis-à-vis HIV/AIDS. 3,200

<sup>76</sup> Data of sentinel epidemiological surveillance in the Republic of Kazakhstan for 2006 presented at the meeting in Almaty on April 9-10, 2007.

<sup>77</sup> Results of sentinel epidemiological surveillance in the Republic of Kazakhstan for 2006 presented at the meeting in Almaty on April 9-10, 2007.

<sup>78</sup> Report on the results of sociological survey: knowledge of HIV/AIDS, attitude, practice among students and working young people of Kazakhstan (prepared for the Republican AIDS Center). Kazakhstan, Almaty-2006. Center for Public Opinion Surveys.

<sup>79</sup> Gender aspects of HIV/AIDS in Kazakhstan. Kazakhstan, Almaty – 2006. Center for Public Opinion Surveys.



young people were interviewed; half of them agree with the statement that the HIV-infected should be isolated from the society. The prevailing attitude to PLH on behalf of the rural population of the Republic is fear and aggression. The circumstances under which a person became infected with the virus influence the attitude. If a person was infected in the «right way» (via transfusion of infected blood, in the hospital and etc.) then regret prevails, if in the «wrong way» (injection drugs with the use of

dirty syringe, sex contacts) – denunciation. Many people think that PLH should be isolated from society: it is undesirable for them to study or work together with healthy people<sup>80</sup>.

The role of PLH in counselling, support and care is significant for other people with HIV. However, in Kazakhstan there are very few people living with HIV involved in this activity; only one person openly speaks about his positive status. The small number of NGOs working with this category of people is of concern.

## National response to epidemic

Since the time of the first case registration in 1987, a system of AIDS centres has been set up in the Republic (there are such centres in all the 14 oblasts of the Republic functioning under the auspices of the Republican Centre located in Almaty). Along with a network of laboratories, 253 facilities for voluntary testing and counselling have been opened up as well as 130 trust centres that exchange syringes and needles within the framework of the harm reduction programme. In Kazakhstan the non-governmental sector has been mobilized; 60 organisations of which carry out activities on HIV control together with professional organisations.

Epidemiological surveillance over HIV is established in Kazakhstan – regular collection of data on the rate and dynamics of HIV spread in the regions of the country with regard to the most affected groups is used to develop effective programmes on HIV prevention. The system of epidemiological surveillance over HIV in Kazakhstan is based on HIV case registration, but it is also complemented by the Second Generation Epidemiological Surveillance, which includes both serologic and behavioural surveys.

Programmes on HIV counteraction are the basis of the country's response to the epidemic.

The term of the Programme of AIDS Control in the Republic of Kazakhstan, endorsed by the Resolution of the Government of the Republic of Kazakhstan of September 14, 2001, № 1207 for 2001–2005, was over in 2005.

Measures implemented within the framework of the aforementioned Programme contributed to sustaining the HIV epidemic in the country at a low level.

To back up the Programme, resources of international donors have been mobilized, including 22.4 mln. USD from the Global Fund for AIDS, Tuberculosis and Malaria (hereinafter – GFATM) for the period from 2004 to 2008. The given grant has been provided within the framework of the Agreement between GFATM and the key grant beneficiary – The Republican Centre for AIDS Prevention and Control, signed on July 29, 2003. In the process of the Programme implementation Kazakhstan has been supported by international partners, including UN organisations: UNAIDS, UNDP, UNESCO, UNICEF; US governmental agencies: USAID, CDC; and international non-governmental organisations (hereinafter – NGOs): Public Services International (PSI), «AIDS – Foundation «East – West», «Soros Foundation – Kazakhstan». The country prepared and submitted an application for 7 Global Fund rounds for 35 million US Dollars. A number of regional projects (financed by the World Bank and Department for International Assistance of the UK) and Project “Capacity” (financed by USAID) provide assistance to the countries of Central Asia, including Kazakhstan.

In December 2006, the Government endorsed the Programme on AIDS epidemic counteraction in the Republic of Kazakhstan for 2006–2010. Kazakhstan, like other countries in world,

<sup>80</sup> Gender aspects of HIV/AIDS in Kazakhstan. Kazakhstan, Almaty – 2006. Center for Public Opinion Surveys.

implements the strategy of Universal Access to Prevention, Treatment, Care and Support for cases of HIV infection. The goals of universal access, which the country is to achieve as of 2010, have been defined when holding national consultations and are included into the National programme.

Of course, prevention of the spread of HIV infection is a priority direction in the Republic of Kazakhstan. Given that transfusion of infected blood or its products is one of the most “effective” ways to disseminate HIV infection, measures on blood safety are stipulated in the Programme. Other stipulations include: measures on prevention of vertical transmission; measures on introduction of informational and prophylactic programmes for young people and the population on the whole; and preventive «Harm Reduction» programmes targeted at drug users and sex workers.

Given that treatment and psychological support are vital components of assistance and support to people living with HIV, the Government of Kazakhstan gives much attention to management of patients with opportunistic infections as well as to treatment with the help of highly active antiretroviral therapy (HAART). Ensuring equal access to HAART for all the people living with HIV is one of the targets of universal access to prevention, treatment and support that are being implemented in Kazakhstan. A system of regular clinical examination and health care for people with HIV has been established in the country alongside access to HAART.

Currently the programme developed for convicts in penitentiary institutions is waiting for endorsement by the Ministry of Justice. A number of oblast level programmes aimed at

HIV prevention have been developed and endorsed, including the Programme of the South-Kazakhstan oblast, which includes measures on mitigation of nosocomial HIV outbreak consequences, alongside with treatment and prophylactic activities.

The Republic of Kazakhstan is one of the countries in which the Law “On Prevention and Treatment of HIV infection and AIDS” (October 5, 1994) has been adopted and is functioning. In 2006 some amendments were introduced into the given Law.

The Declaration on Commitments adopted by the 26th UN General Session in 2001 specially highlights the fact that strong political leadership and interagency cooperation is necessary for successful infection counteraction. No doubt, the role of health bodies and sanitary-epidemiological surveillance regarding prevention and treatment of HIV and AIDS in the Republic of Kazakhstan is very significant, however there are other aspects of the HIV problem that are within the terms of reference of other institutions and organisations.

These aspects include issues of social protection, drug addiction control, culture, science, education, labour and migration that require complex regulation and coordination. Uncoordinated activity of ministries and sectors will be ineffective.

Given the aforementioned Resolution of the Government of the Republic of Kazakhstan on February 3, 2005, the National Coordination Council on Health Care was created and on April 11, 2001 some amendments were introduced as part of its composition. The Council is headed by the Minister of Health, while representatives of related ministries and sectors are members.

## Ways to address existing problems

The HIV epidemic in Kazakhstan is far from stable and to achieve the Goals of Millennium Declaration it is necessary to recommend the following actions.

### Bringing up political and social commitment

The firm and responsible political attitude of

high-level authorities needs to be in place to successfully implement programmes aimed at controlling an epidemic spread of HIV infection. Further support of the National Coordination Centre on health care, specifically the creation of a Secretariat that would facilitate relations between partners and sectors, the holding of regular meetings, and the participation of high level officials will enhance coor-

dination of response measures in the country and will make it easier to manage response measures. Promotion of a unified Multisectoral Coordination Committee that would include all the ministries, sectors, non-governmental organisations, private sector, and representatives of communities of people living with HIV and would be headed by the Prime minister is a vital component of success.

### Legislative basis coordination

Perfection of the legislative basis on social protection and support to people living with HIV and members of their families is a priority direction of epidemic control, especially given registration of nosocomial outbreak among children-patients in a number of hospitals of the South-Kazakhstan oblast. Access to child institutions for children with HIV on equal terms with other children should be fixed in regulatory documents to help overcome isolation of such children and improve their social adaptation. It is essential to stipulate access to services and care for all categories of people living with HIV, and in this specific case for prisoners.

### Improvement of Data collection and use of critical information

- ♦ Assessment of social-economic impact of HIV and AIDS dissemination. It is recommended to develop estimates and forecasts of the possible HIV epidemic impact upon the economy growth rate, poverty level and social inequality in Kazakhstan. The recent experience of the Russian Federation manifested that such estimates and forecasts may influence the thinking of high-level authorities when using them within the framework of a dialogue.
- ♦ Perfection of the system of epidemiological surveillance. Formation of an electronic confidential data base about all the surveys implemented in the country, all the cases detected including data on clinical status will enhance monitoring and evaluation and will simplify working with the information. Further perfection of methods of "sentinel epidemiological surveillance" comple-

ments the system of case registration and may make the system of epidemiological surveillance in Kazakhstan one of the best among CIS countries.

- ♦ Efficiency of the use of financial means. It is necessary to enhance knowledge in the field of management including financial management. Monitoring of financial means and efficiency of their use should become a part of the Coordination Committee agenda.
- ♦ Perfection of unified system of monitoring and evaluation. Regular perfection of the system set up in Kazakhstan to monitor and evaluate the response to the epidemic is one of the main directions, which will make it possible to collect, consolidate and centralize data about all the projects being implemented in the country and simplify the process of tracing the effectiveness of the implementation of different projects and of individual activities.

### Further enhancement of HIV dissemination prevention

- ♦ Blood safety improvement. Given the recent nosocomial HIV outbreak caused in part by the violation of blood transfusion safety, it is necessary to reinforce the system of blood safety with such measures as preliminary screening and donor selection, mandatory donor blood testing, transition to «voluntary» blood donation, refusal from fee-paid donations, organisation of a donor blood «quarantine», upgrading blood transfusion centres, and the development of internal and external quality control systems.
- ♦ Prevention of HIV vertical transmission. The all-round introduction of drug-based programmes for women with HIV aims to prevent HIV transmission from mother to child. The use of UNAIDS and WHO recommended tests can be initiated by doctors in antenatal clinics and maternity hospitals.
- ♦ Development and implementation of youth-oriented effective prophylactic programmes. Alongside with the HIV prophylactic programme there should be programmes to prevent drug addiction and drug use by the

population and especially the most vulnerable part of it – youth and adolescents – as well as programmes on drug business control. To prevent sexual HIV transmission, health education should include not only safe sex issues, condom distribution, and treatments of STI but also issues of sexual health including programmes aimed to develop knowledge and skills necessary to foster responsibility for one's own health and sexual behaviour.

- ♦ Raising awareness among population. To improve problem understanding it is necessary to raise the awareness and improve the health education of the entire population. Mass media involvement is very important: training journalists in different aspects of HIV problems, especially aspects targeted at opposing the rejection of people living with HIV, is important for stigma and discrimination control.
- ♦ Enhancement of the programme on «Harm Reduction». Careful analysis of the quality of such services provided in the country on «Harm Reduction» such as voluntary counselling and screening for HIV infection, syringe exchange, treatment of drug addiction and rehabilitation, and a programme of replacement therapy for those in need of it with follow-up recommendations on their improvement will bring up their effectiveness and produce a measurable impact in terms of HIV spread prevention.
- ♦ Enhancement of the system of prophylactic measures among sex workers and their clients. Sex-workers and their clients are among the main categories for high-risk of HIV transmission to the «boundary» population, through which the virus may spread among the general population. Reinforcement of such measures as serologic and behavioural surveillance, voluntary counselling and testing for HIV infection, adequate education, diagnostics and treatment of sexually transmitted infections, and the promotion of mandatory condom use by sex workers and their clients will stabilize the situation in the country.
- ♦ Development of prophylactic programmes with the focus on the elimination of gender-

based discrimination is necessary due to greater vulnerability of women living with HIV. Special attention should be given to the implementation of reproductive rights of women with HIV.

### Putting up together a comprehensive system of good quality health care support

To ensure effective treatment it is necessary to improve activity in the area of adherence to therapy, toward timely revision and updating of existing protocols in line with the best international standards, and toward supervision of the timely procurement of antiretroviral drugs and their distribution in the regions. An important aspect is widening the choice of antiretroviral drugs at the pharmaceutical markets of the country. It is necessary to carry out regular training and retraining of doctors and paramedical (mid-level) health workers, which will make it possible to trace adverse events of some drugs and in case of necessity to change treatment regimes, as well as bring up the knowledge level of specialists in the area of HIV and AIDS among adults and children. Effective use of HAART is impossible without well equipped laboratories that allow tracking changes in the immune system of a patient, likewise detecting HIV forms resistant to drugs and taking measures to bring down the risk of the development of drug-resistant HIV forms. Further strengthening of Polymerase Chain Reaction (PCR) is an integral aspect of successful treatment.

HIV management in drug addicts is a special issue. Specific HIV infection treatment regimens need to be developed for drug users, giving special attention to treatment «adherence», as well to the fact that such patients may be on substitution therapy, and in such cases it may be necessary to have special protocols on simultaneous treatment with antiretroviral drugs and substitution therapy drugs (given their combination and interaction). Taking into account the close link between the HIV epidemic and drug addiction epidemic it is necessary to develop effective programmes on rehabilitation of drug addicts.

Given that 80% of HIV infected people in the regions are drug users with co-infections there is also a necessity to devise treatment regimens for people with co-infections: HIV infection + Hepatitis C/B.

### **In the area of support and care**

At the given stage of development of the HIV epidemic, what needs to be done is to ensure psychological and social support to people living with HIV, which will neutralize the negative severe stress impact and help ensure normal life. To achieve this goal it is necessary to strengthen non-governmental organizations, work with those living with HIV, and also to enhance the training of social workers. The involvement of people living with HIV through setting up support and mutual aid groups helps to overcome stigma and discrimination. All the above are priority directions for Kazakhstan.

### **Strengthening cooperation and partnership**

- ♦ It is necessary to set up new and to further develop existing partnerships of governmental and non-governmental organisations; unions of people living with HIV; civil society and the private sector. Further capacity building of NGOs is an integral part of success.
- ♦ Effective cooperation between UN agencies within the framework of «Joint UN Team on AIDS» and «HIV/AIDS Theme Group» may help to implement the National AIDS Programme and to achieve goals of Universal Access.

### **Research development**

In order to improve the quality of epidemiological surveillance, prophylaxis and treatment effective research developments and priority research financing related to HIV and AIDS are needed. Publication of the experience the Republic of Kazakhstan has accumulated in the field of epidemic control in the space of 20 years will be a valuable contribution to the efforts on epidemic control in other countries.

## **CONCLUSION**

Provided the aforementioned activities are implemented we may expect sustainable stabilization of the HIV related situation in Kazakhstan. However, success in this field can be expected only in with the concerted efforts of all stakeholders – the Government, public agencies, civil society, non-governmental organisations, associations of people living with HIV, the private sector, and mass media, which have to enhance their response measures to the HIV epidemic. All parties need to concert efforts and increase resources to facilitate the achievement of the strategic objectives. The future of Kazakhstan depends on the efficiency of HIV control measures.

## Target 8. Halt by 2015 and begin to reverse the incidence of tuberculosis

Progress in achieving this target is assessed based on the following indicators:

- ♦ Prevalence and death rates associated with tuberculosis
- ♦ Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)

### National policy and changes in legislative-legal basis for 2004-2007

One of the priority directions of social policy of the Republic of Kazakhstan is tuberculosis control. This was highlighted in the annual Address of the President of the Republic of Kazakhstan to the people of Kazakhstan and is reflected in regulatory acts of national importance – sector programme «Enhancement of Tuberculosis Control in the Republic of Kazakhstan for 2004-2006», endorsed by the Resolution of the Government of the RK of August 13, 2004, № 850, and also in the National Programme of Health Sector Reforming and Development in the Republic of Kazakhstan for 2005-2010, which was endorsed by the Decree of the President of the RK of September 13, 2004, № 1438. The Sector Programme on Tuberculosis for 2004-2006 with a volume of financing and resource distribution out of the Republican and local budgets the size of \$13 man. 413.5 thousand (13.3% share of the republican budget) makes up stipulates the following activities:

- ♦ Development of priority measures targeted at stabilization and improvement of the tuberculosis related situation in the country;
- ♦ Organisation of treatment-rehabilitation and prophylactic measures on all the stages of tuberculosis case management with the involvement of the PHC network and with the use of unified protocols of TB case management;
- ♦ Integration of TB services with other public agencies and sectors;
- ♦ Improvement of a National Register of TB cases;
- ♦ Improvement of the material and technical basis of all levels of TB service, including

the one in the penitentiary system by way of furnishing TB facilities of the Republic with X-ray diagnostic equipment, fine resolution microscopes, roentgen fluorography films and chemical reagents;

- ♦ Step by step opening up of specialized departments in oblast TB clinics for treatment of patients with chronic TB forms with regular bacterial excretion;
- ♦ Reorganisation of specialized departments under the oblast TB facilities for forced or compulsory treatment of TB patients with smear positive TB form that avoid treatment;
- ♦ Continuation of research with the introduction of the newest methods of diagnostics and treatment into practical health care;
- ♦ Social support to patients with tuberculosis and to health workers of TB organisations;
- ♦ Advancement of qualification and knowledge level of TB specialists.

Implementation of the sector Programme of TB control for the period of 2004-2006 made it possible to furnish TB facilities with 35 computed-tomography scanners, 519 pieces of laboratory equipment, 76 binocular microscopes, 60 sanitary motor transports, and 6 stationary and 10 mobile photofluorography units.

In order to stabilize and improve the TB-related epidemiological situation, the Government of the RK issued its Resolution of 3.02.2005, № 99 «On Putting Together a National Coordination Council on Health Care under the Government of the Republic of Kazakhstan», which was the basis for the formation of a high level Technical Working Group on tuberculosis,

whose aim would be technical assistance to the Government of the Republic of Kazakhstan in further development and implementation of the National TB Control Programme.

Regulatory acts of the Ministry of Health of the RK (hereinafter – MOH RK) have been adopted during the period of 2005–2007 with the aim of reinforcing activities on tuberculosis control in the Republic, endorsing:

- ♦ Methodology to determine the needs in TB drugs;
- ♦ Improvement of a National Register of TB patients;
- ♦ Carrying out joint monitoring of detection, diagnostics and treatment of TB patients in penitentiary facilities of the Ministry of Justice of the Republic of Kazakhstan;
- ♦ Prevention of TB dissemination among the population in the Republic of Kazakhstan;
- ♦ Establishment of minimal standards (norms) of equipping TB facilities with medical technology and medical goods;
- ♦ Ensuring effective epidemiological surveillance in order to prevent, detect and treat tuberculosis in line with international standards;
- ♦ Regulations regarding the activity of TB organisations and public bodies of sanitary-epidemiological services on TB control;
- ♦ Instructions on TB control;
- ♦ Putting together a group for monitoring indicator-based TB control activities in oblast and regional TB facilities.

The Ordinance on MDR TB, Guidelines on Tuberculosis and Multi-drug Resistant Tuberculosis, have been devised and endorsed.

In all the oblasts regional programmes on TB control for 2008–2010 are endorsed. A Plan of Action on TB control at the interagency level has been developed in the Republic of Kazakhstan for the period of 2008–2012.

All the sputum positive patients that are dispensary-registered are covered by screening for drug resistance, which is based on par with international recommendations. In the dispensary section of TB service activity, the system of registration of all TB patients and outcome of their treatment will be totally revised and will

be organized strictly by the place of detection and residence, regardless of registration, and will be arranged separately for residents, those of the migration population and prisoners.

Registration and reporting documentation is being reformed, a National Register with access for all the sectors concerned is being modified, and an electronic system of surveillance over each registered TB case has been set up and its trial in oblasts and throughout the entire country is being finalized. In order to reform research pursuant to international standards and implement it with the use of evidence-based medicine, joint work with KNCV and CDC will be done.

During 2004–2006 23 TB health facilities were built; in 2007 – 8 facilities were built at the expense of republican and local budgets.

In line with the Law of the RK of December 10, 1999, № 496-I «On Forced Treatment of TB Smear Positive Patients» 9 specialized departments are functioning in oblast TB dispensaries for mandatory treatment of AFB (acid-fast bacilli) positive sputum patients with a bed capacity of 305.

The material and technical basis of laboratories in oblast and regional TB dispensaries is being improved, as well as their furnishing with state-of-the-art laboratory equipment, while medical bacteriologists and laboratory technicians have a chance to annually advance their qualifications. An introduction of the system of control over the screening quality makes it possible to carry out a culture of a patient's sputum and determine their drug resistance profile. In 1999 Kazakhstan was included into the WHO Programme on Drug Resistance study at a global level.

To that end, the reference-laboratory of the National TB Centre of the RK (hereinafter – NTBC RK), the only one in a CIS country, has been tested for quality control in the supranational laboratory in Borstel (Germany) and was awarded the status of National Reference-Laboratory.

Major methods of TB detection in Kazakhstan include clinical, radiography and bacteriological analysis, while with regard to children they include immunologic, clinical and to some extent diagnostic radiography.

Implementation of varied screening of the risk group population, targeted at their annual coverage with the aim of early TB detection, is a key aspect of stabilization and partial improvement of the TB-related epidemiological situation.

One of the important indicators, defining timely tuberculosis detection, is specific weight of destructive forms among new cases of pulmonary tuberculosis, which has gone down from 48.0% in 2001 to 35.0% in 2006. The Government of the Republic of Kazakhstan and the MOH RK give much attention to the improvement of the material and technical basis of TB service and to furnishing it with medical equipment. However, review of the status of TB health facilities in the country revealed that 33.7% of them are located in standard premises, 55.1% in non-standard ones, and 11.2% in adjusted buildings. The main problem in the majority of hospitals is the lack of an engineering basis for infectious control. That is why the material basis is in need of step-by-step restructuring (arrangement of the system of ventilation, reorganisation and setting-up inter-district in-patient facilities, conditions for strict isolation of patients depending upon epidemiological significance).

One of the most serious problems of the present-day phthiology in Kazakhstan is drug resistance of the TB pathogen. Based on the assessment, 450,000 new cases of MDR TB are registered annually all over the world, including 70,000 in the European region. In Kazakhstan, unfortunately, there is a trend to disseminate the drug-resistant form of TB among patients of TB dispensaries.

Currently there are more than 8,000 patients

with a form of multi-drug resistant TB. Because of this, the DOTS-Plus Programme has been implemented in the Republic since 2000, the aim of which is to further prevent the development and dissemination of multi-drug resistant tuberculosis. Initially the «pilot» project was implemented in 4 regions of the country with the follow-up replication of the project on the rest of the territories. Since 2003 the «pilot» DOTS-Plus projects are being implemented on the entire territory of the Republic. There are 18 fully equipped specialized departments for management of patients with multi-resistant tuberculosis with the bed capacity of 695. A pool of clinicians and bacteriologists has been trained for that purpose.

Monitoring of detection, diagnostics and treatment of multi-drug resistant tuberculosis is done on an annual basis in the country. DOTS-Plus Programme implementation in Kazakhstan is backed up by legislative acts and also methodological recommendations of the NTBC. DOTS-Plus Programme implementation is now going on in the country oblasts and regions. New Prikaz on multi-drug resistant tuberculosis has been developed. However the rate of new and acquired drug resistance is still high, including among patients with MDR TB. Compared to 2005, the rate of new multi-drug resistance in the Republic went down 45.2% in 2006, including MDR – 13.1%, acquired resistance – 74.1%, including MDR – 39.1%.

Mention should be made that there is ambiguity with regard to the reliability of routine culture and drug sensitivity tests of MBT (TDS) due to: 1) ambiguity of laboratory standards used, which need updating; 2) lack of clarity as to defining the category of TB patients.

## Causes of MDR TB incidence

### 1. Infection transmission:

- ♦ In 2006 only 21.8% of MDR TB cases detected received treatment (except prisoners) and even less of them in the previous years;
- ♦ 13% of new cases, 40% of relapses and 70% of chronic cases with MDR transmit TB while in the hospital. This occurs

in the absence of tests for MBT sensitivity, in overcrowded wards and in the absence of infectious control;

- ♦ Late diagnosis of MDR TB (1-3 months).

### 2. Amplification of drug resistance:

- ♦ Treatment regimens of Category I, II are not able to prevent MBT resistance amplification in certain groups of patients.



### 3. Frequent treatment interruptions.

### 4. Drugs of unknown quality.

At same time, the situation with multi-drug resistant tuberculosis in the country necessitates the resumption of culturing in TB facilities of the rayon level.

The centralized supply of TB health facilities with TB drugs on reserve/on tender basis is due to the resources allocated from the republican budget and the MOH RK and impacts the efficiency of DOTS-Plus Programme.

The most objective and important indicator of the efficiency of TB service is the «cure» rate of new infectious cases. The given indicator depends upon timely detection of TB patients, which in its turn is significantly determined by the PHC network level and the quality of laboratory (microscopy) service. Detection of the disease at an earlier stage, and the timely initiation of treatment positively impact the “cure” rate. Efficiency of treatment also depends upon correct treatment tactics including continuity, controllability, observation of prescribed protocols and treatment regimens.

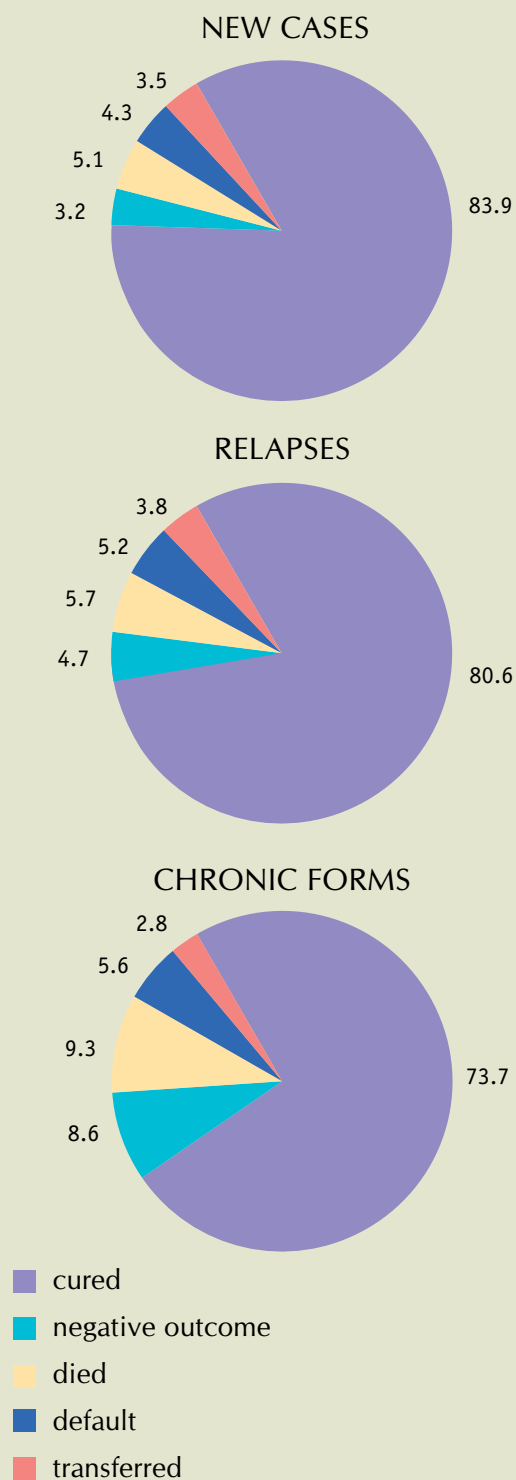
The treatment efficiency of new cases with smear positive results registered 12-15 months ago is low and makes up 70.8%. The reasons for such a low cure rate are violations of the treatment regimen on the part of patients and drug resistant tuberculosis. More than 377.2 thousand patients have been treated under the DOTS Programme since 1998.

The problem of TB control is still on the top of the agenda in penitentiary institutions, given that they represent a huge «reservoir» of tuberculosis infection, the role of which in the TB epidemic is quite obvious today. Shortage of staff and inadequate implementation of treatment protocols contribute to the development of TB drug-resistant forms in these institutions. At the same time, positive changes have taken place since the time DOTS strategy started being implemented in penitentiary institutions, i.e., since 1999, and they are expressed in reduction of incidence by more than 5 times, and mortality from tuberculosis by more than ten times.

Close cooperation with international organisations like KNCV, contributes a lot to this

**Graph 6.3.**

Treatment efficiency of MDR TB cases for the period of 2003–2005 in the RK (%)



Source: The National Centre of the Republic of Kazakhstan on problems of tuberculosis (statistic yearbook).

progress. Since 1998 KNCV has been implementing the project on «Penal System Reforming. Alternatives to Imprisonment. TB treatment in Prisons of Kazakhstan» in Akmola, East-Kazakhstan, Karaganda and Pavlodar oblasts, in which TB colonies are basically concentrated.

Medical and technical support of TB facilities in penitentiary institutions of Akmola, North-Kazakhstan and South-Kazakhstan oblasts is stipulated under the Economic Agreement between the Government of the Republic of Kazakhstan and Germany on issues of TB control.

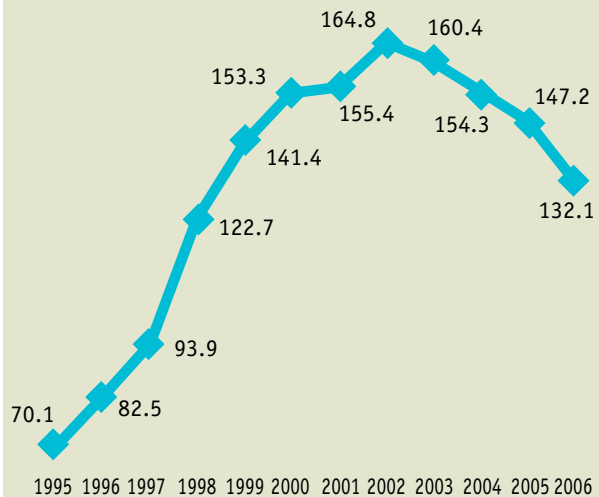
TB service in the penitentiary system has been reinforced within the implementation framework of the programme aimed at further development of the penal system of the RK for 2004-2006, the financing volume of which made up \$71 mln. 969.7 thousand. This Programme was endorsed by the Resolution of the Government of the RK, № 1376 of December 31, 2003.

In 2006, The Global Fund for AIDS, tuberculosis and malaria approved the Country Application of Kazakhstan for the sum of \$9,842,621. All the measures listed in this Application are aimed at ensuring TB services to the country population. Tuberculosis is a leading cause of mortality among HIV-infected people with compromised immune systems. In 2005, based on the estimates available in the world, there were 14,000 registered new cases of tuberculosis among the adult population. In Kazakhstan, according to the Register Data base, there have been 722 registered TB/HIV cases in the period of 2003-2006, out of which 261 are new cases.

Analysis of major epidemiologic TB-related indicators in the country for the period from 2004 to 2006 manifests the reduction and obvious trend toward stabilization of the TB epidemiological situation. This is true with regard to the civil health care sector and penitentiary system. In the course of the last three years, the incidence index in the civil sector has gone down from 154.3 in 2004 to 132.1 in 2006 per 100 thousand of the population. Compared to the previous 2005 incidence rate, an incidence reduction of 10.3% for 2006 is observed in all oblasts.

**Graph 6.4.**

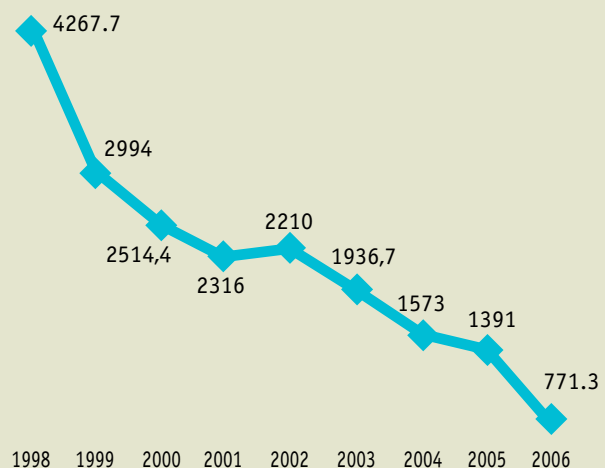
Incidence caused by tuberculosis in the Republic of Kazakhstan per 100,000 of the population



Source: *The National Centre of the Republic of Kazakhstan on problems of tuberculosis (statistic yearbook), the Agency for Statistics of the Republic of Kazakhstan.*

**Graph 6.5.**

Incidence caused by tuberculosis in penitentiary institutions of the MoJ RK per 100,000 of the population



Source: *Data of penitentiary institutions of the MOJ RK, the National Centre of the Republic of Kazakhstan on problems of tuberculosis (statistic yearbook), the Agency for Statistics of the Republic of Kazakhstan.*

A similar situation is to be observed in penitentiary health sector, in which the incidence rate has been reduced from 1573 in 2004 to 771.3 per 100 thousand of inmates in 2006.

The tuberculosis incidence rate above the republican level is still registered in the West region oblasts: Aktobe (167.3) Atyrau (204.4), West-Kazakhstan (171.9), Kyzylorda (193.7), and Mangistau (166.0) per 100 thousand of the population. In the course of the last years these oblasts have been traditionally among the «leaders» in infection; however general positive trends in incidence rate reduction are registered in their oblast programmes as well.

A considerable reduction of neglected TB cases was registered during the period of 2004–2006 among new patients, from 830 in 2004 to 457 in 2006. Compared to 2005, the number of advanced cases in 2006 went down by 32%.

One of the major objectives and important criteria reflecting the status of the epidemiologic situation is the TB-related mortality rate, which has gone down by 2.4% in 2006 in the Republic to make up 20.3 compared to 20.8 in 2005 per 100 thousand of the population. Growth of the TB-related mortality rate is registered in the following oblasts: Akmola by 15.4%, in East-Kazakhstan by 6%, in Zhambyl by 4.7%, in Kostanai by 10.2%, in North-Kazakhstan by 26.0% and in Astana city by 24.6%.

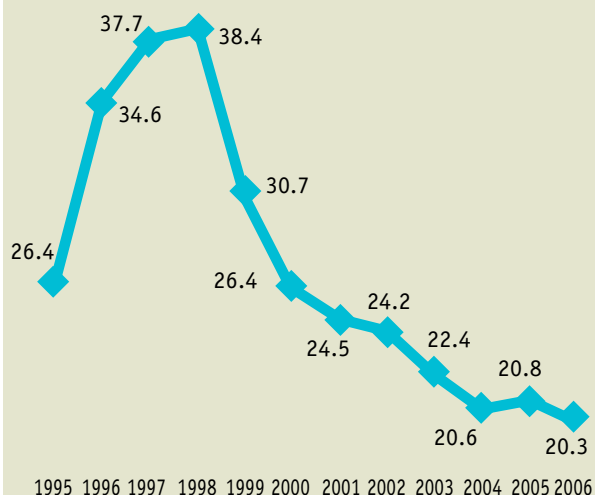
The structure of TB-related mortality in the Republic includes chronic pulmonary tuberculosis at 51.8%, new cases at 7.5%, relapses at 13.4%, those arrived from penitentiary institutions of the MJ RK at 10.8% and homeless people at 13.5%.

In 2006 mortality caused by tuberculosis among prisoners within the penal system increased and made up 64.9 (103 patients died) against 55 per 100 thousand of the inmate population for the previous year (growth by 12.9%). The mortality ratio increase in 2006 is due to the growth of the number of deaths among patents with chronic tuberculosis and MDR TB.

The epidemiologic situation in the Republic is aggravated by the incidence of drug-resistant TB forms, TB/HIV and also by the serious situation in TB colonies.

**Graph 6.6.**

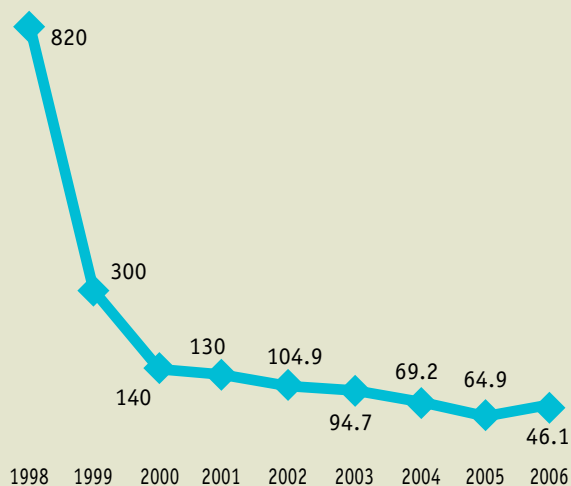
Mortality caused by tuberculosis in the Republic of Kazakhstan per 100,000 of the population



Source: *The National Centre of the Republic of Kazakhstan on problems of tuberculosis (statistic yearbook), the Agency for Statistics of the Republic of Kazakhstan.*

**Graph 6.7.**

Mortality caused by tuberculosis in penitentiary institutions of the MJ RK per 100,000 of the population



Source: *Data of penitentiary institutions of the MOJ RK, the National Centre of the Republic of Kazakhstan on problems of tuberculosis (statistic yearbook), the Agency for Statistics of the Republic of Kazakhstan.*

# CONCLUSION

## Tuberculosis-related situation

According to the formal WHO data for 2005, the Republic of Kazakhstan is leading in terms of TB incidence with 147 infected per 100,000 of the population and is among 18 priority countries in terms of tuberculosis of the WHO European region. Besides that, prevalence of Multi-Drug Resistant Tuberculosis (MDR TB) is one of the highest in the world.

## Major achievements in tuberculosis control

- ♦ Good political commitment to TB control on all the levels.
- ♦ Well functioning TB service integrated with the general health facilities network.
- ♦ Close cooperation between civil and penitentiary sectors.
- ♦ Strict implementation of Prikazes of the MOH RK was observed in all the oblasts and cities visited by the mission.
- ♦ All the TB drugs of the first and second lines are registered and are produced by the RK.
- ♦ In recent years decreasing trends of registered TB incidence have become obvious.

## Problems hindering stabilization and improvement of the epidemiological situation with regard to tuberculosis in Kazakhstan

- ♦ High rate of tuberculosis with multi-drug resistance.
- ♦ Improper epidemiological surveillance and registration of consumptive.
- ♦ Deficit of qualified staff in TB service.
- ♦ Lack of action plan aimed at improving TB-related epidemiological situation, reducing prevalence and mortality caused by TB
- ♦ Lack of infectious control in the laboratories and hospitals (conditions in laboratories performing culturing and TDS are not safe for the personnel and as a consequence results of their tests are not reliable).
- ♦ Inadequate integration with the system of HIV/AIDS control
- ♦ Inadequate sanitary knowledge of the population related to tuberculosis due to its stigmatization.

Regardless of the complex epidemiological situation there is the possibility of achieving this target provided that the aforementioned problems hindering the stabilization and improvement of tuberculosis-related epidemiologic situations are eliminated.

# MDG 7. ENSURING ENVIRONMENTAL SUSTAINABILITY



Since the time the Second Report 2005 was published, «Development Goals on the Turn of Millennium in Kazakhstan», the Republic has achieved certain success in the implementation of declared commitments on transition to sustainable development. Important events include setting up the Sustainable Development Council of the RK (2005), adoption of the concept of transition to sustainable development by 2024 (2006) and the Environmental Code of the RK (2007). Principles of sustainable development are reflected in the strategy Kazakhstan maintains of being listed among

50 the most competitive countries of the world (2006).

Goal 7 – ensuring environmental sustainability – is the basic priority of achieving sustainable social and economic development of the society. During the period of 2004-2006 Kazakhstan increased its global rating in the area of environmental sustainability and moved from 75th to 70th place<sup>81</sup>. The target of increasing the environmental sustainability index by 10% as of 2012, by 15% as of 2018 and by 25% as of 2024 has been set in the Concept of transition of the RK to sustainable development.

<sup>81</sup> Report of the Minister of Environmental Protection on Kazakhstan Agenda -21, Astana, April 2006.

## Target 9.

### Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Assessment of the status of the natural environment and environmental-economic situation in Kazakhstan given in the previous report on Target 9 implementation (2005)<sup>82</sup> showed that this target is the most complex for implementation. The reason lies in existing trends of economic development of the Republic related to the growth in volume of production and export of mineral and raw materials as well as fuel resources, which is accompanied by the loss of natural resources and a high level of man-made pollution. Lack of a formal programme on conservation and rational use of national wealth, faulty sector policy of forest management, lack of measures on inventory of biodiversity, a poor system of environmental quality management, and a shortage of funds for nature conservative measures have already been noted.

Progress in achieving this target is assessed based on the following indicators:

- ♦ proportion of the territory covered by forests
- ♦ proportion of protected territory to maintain biodiversity of ground environment, carbon dioxide emission (per capita) and use of ozone-depleting (ozone-absorbing substances)
- ♦ ecologic-economic indicator – GDP power intensity

### Status

In 2005–2007, Kazakhstan adopted a number of national documents aimed at ensuring environmental sustainability of the national economy: Concept of Transition of the RK to Sustainable Development as of 2024<sup>83</sup>, Ecological Code of

the RK<sup>84</sup>, the Law of the RK «On Specially Protected Areas»<sup>85</sup> and other International conventions contributing to biodiversity conservation and the decrease of the pollution level in the natural environment have been ratified.

The Programme of the Government of the RK for 2007–2009 defined transition to sustainable development, bringing up the quality of life for the population and human capital development as a priority directions. The Programme stipulates introduction of a system of targeted indices and indicators of sustainable development by each region and by sectors. It is expected that the level of environmental pollution will decrease by way of enhancement of state control over placement and recycling of wastes, production and consumption, development of the mechanism of rational nature management stimulation, and the introduction of environmental management and international standards. The methodology to assess ecological damage caused by the activity of oil companies has been devised, mechanisms for international legal regulation of the given problem have been actively used and the system of ecological monitoring is being set up<sup>86</sup>. The Ministry of Environmental Protection intends to introduce regional quotas for emissions in 2008.

To ensure state regulation of greenhouse gases (GHG) emissions and consumption of ozone-depletion substances (ODS) their maximum permissible levels are defined in line with the Ecological Code of the RK. Requirements on the necessity of governmental registration of GHG sources have been legitimized. In May 2007, RPC «KazNIIEC» completed an inventory of greenhouse gases emissions at Karachaganak

<sup>82</sup> Overview of the Implementation of Millennium Development Goals in Kazakhstan, 2005.

<sup>83</sup> Concept of Transition of the RK to Sustainable Development as of 2024, 2007.

<sup>84</sup> Ecological Code of the Republic of Kazakhstan, 2006.

<sup>85</sup> The Law of the RK «On Specially Protected Natural Territories», 2006.

<sup>86</sup> Report of the Prime-Minister K. Masimov «On the Programme of the Government for 2007–2009» at the joint meeting of chambers of Parliament of the RK, 2007.

oil and gas-condensate field, the biggest in the Republic. UNDP Guidelines on the Environment and GHG Protocol of the World Council of Businessmen for Sustainable Development have been used for the estimates<sup>87</sup>.

The Government of the RK expects that as of 2009 regulatory measures will be developed on the use of renewable energy sources: hydropower resources, wind energy potential, associated gas recovery at oil fields, solar energy etc. with the aim of bringing down the

share of fuel energy, the major GHG producer, in the energy-balance of the country.

According to the data of the Statistic Agency of the RK, in recent years the volume of investments channelled into environmental protection and rational use of natural resources has considerably increased. Thus, 22 times more resources were allocated for air protection in 2005 compared to 2000 and the sum of 60.5 mln. tenge has been allocated for setting up natural reserves<sup>88</sup>.

## Forest condition

This year implementation of the Programme of reforestation of the RK «Zhasyl Yel» is to be finalized. However, efforts to stop the process of forest degradation that started in the years of reforms in Kazakhstan have failed so far. In 2003-2007 the annual average growth of the general forest area made up only 0.5%. The percentage of forest lands and general stock of standing wood as well the area of woodlands remained practically unchanged.

The area of deforestation in 2006 made up 42.4 thousand hectares, which is almost one and a half times more than in 2003; at this only 24.4 thousand hectares of forests have been subject to sanitary deforestation. The year 2005 was characterized by a boosting of major activities in forestry: reforestation measures were implemented on the territory of 21.7 thousand hectares, including forest planting and sowing on

16.7 thousand hectares. In 2006 the volume of such works reduced again (18.9 thousand hectares and 8.1 thousand hectares, respectively)<sup>89</sup>.

Analysis of the situation in the forestry and making responsible decisions are difficult due to the lack of coordinated information: formal statistical data very often differ from sector data. Thus, based on the materials of the Committee of Forestry and Hunting (CoFH) in 2006 reforestation was done on the territory of 33.9 thousand hectares, including planting and sowing on the territory of 30.4 thousand hectares,<sup>90</sup> with the aim to implement the programme «Zhasyl Yel». Fires exacerbated by weather conditions caused severe damage to forestry. In 2006, oblast Akimats registered 384 cases of forest fires on woodland territory comprising 10,062 hectares. Fires damaged 11,867 hectares of forests in specially protected areas.

**Table 7.1.** Major forestry indicators

Years	2003	2004	2005	2006	2007
Total forestry area, mln. hectares	26.1	26.2	26.5	26.5	26.8
Woodlands, mln. hectares	11.7	12.4	12.4	12.3	12.3
Total stock of standing wood, mln. cubic meters	373.6	375.6	375.8	375.8	375.8
Percentage of forest lands, %	4.3	4.6	4.5	4.5	4.5

Source: *Statistic Yearbook of Kazakhstan. 2007.*

<sup>87</sup> Presentation of the Project «Stocktaking Greenhouse Gases at Karachaganak Oil and Gas-condensate Oil Field (KOGCOF) and Forecasts for the Emission of Greenhouse Gases at KOGCOF as of 2015» at RPC «KazNIIEC», May 21, 2007.

<sup>88</sup> Collection of Informational-analytical Papers «Kazakhstan During Independence Years», SA RK, 2006.

<sup>89</sup> Statistic Yearbook of Kazakhstan, 2007.

<sup>90</sup> Information on the activity of the Committee of Forestry and Hunting in 2006 and tasks for the 1st quarter of 2007.

## Special protected areas (SPA)

Work on the protection and reproduction of water, forest, fish and fauna has been continued in the Republic of Kazakhstan. In 2005, a List of Objects of The National Reserve Fund of republican and international significance, and Rules of Limited Use were endorsed for objects of republican and international significance located in the SPA. In addition, a List of Land Plots of special ecological, scientific, cultural and other value within the SPA category of republican significance was endorsed.

In 2007, work on setting up the national park «Kolsai Lakes» in Almaty oblast and Irgiz-Turgai national natural reserve in Aktobe oblast is to be finalized. The feasibility study of expansion of the Charyn state national natural park and West-Altai nature reserve territories has been devised; a feasibility study of Katon-Karagai state national natural park has been corrected. Material and technical supplies are being improved: in 2006 within the framework

of the government contractual work for SPA, fixed assets for the sum of 131 mln. tenge were procured in 2006, which is twice as much as the volume of financing in 2005.<sup>91</sup>

The total area of reserves and national parks in 2002–2006 increased by 35%, however as of now the number of SPA (21) has not achieved the level of 2002. Sustainable growth of the number of personnel in SPAs has been observed in the course of the last five years<sup>92</sup>. It should be taken into account that data of the Statistic Agency of the RK does not include natural conservation territories listed as SPA of republican significance, which has already been pointed out in the previous report (based on the materials of the CoFH, total area of SPA makes up 14,268,187 hectares). Steppe fires of recent years were the cause of huge forest fires, which damaged the Bayan Aul National Park and reserves like the «Yertys Ormany» (several times) and «Semei Ormany».

**Table 7.2.** Nature reserves and national parks

Years	2002	2003	2004	2005	2006
Number of nature reserves, national parks and state nature reserves	25	18	20	20	21
Their area, thousand hectares	2,833.4	3,262.0	3,427.1	3,463.6	3,816.5
Number of personnel, people	1,790	2,597	3,012	3,304	4,128

Source: *Statistic Yearbook of Kazakhstan. 2007.*

## Power intensity

The power intensity of the national economy is one of the basic indicators of sustainable development. This is the ecological-economic indicator, which reflects the level of economic and technological development and which indirectly indicates environmental threats. This parameter is of special significance for Kaz-

akhstan given the leading role of the energy sector in the formation of the GDP, budget revenues and in environmental pollution.

The energy potential of the Republic makes up 14.4 thousand MW. In 2006 energy generation in the RK reached 71.6 bln. KW/h, and thermal energy 74.2 mln. Gkkal<sup>93</sup>. Major en-

<sup>91</sup> Information as to the activity of the Committee of Forestry and Hunting in 2006 and tasks for the 1st quarter of 2007.

<sup>92</sup> *Statistic Yearbook of Kazakhstan, 2007.*

<sup>93</sup> *Statistic Yearbook of Kazakhstan, 2006.*



ergy producers in the country are the thermal power stations of Pavlodar and Karaganda oblasts using high-ash domestic coal. The largest energy consumer in the Republic is industrial production (above 30% of GDP). The specific power intensity of the GDP in Kazakhstan exceeds similar indicators in developed countries by 2.5-4 times. The underlying reasons for it include the considerable wear and tear on production facilities and use of outdated technologies, which result in the excessive use of heat and electric energy, the lack of complex energy saving methodologies, inadequate investment and financial mechanisms that could stimulate energy-efficient production. The Law "On Energy-saving" (2004) is not implemented in reality regardless of the fact that investments into energy-saving are 3-5 times more effective compared to additional energy generation.

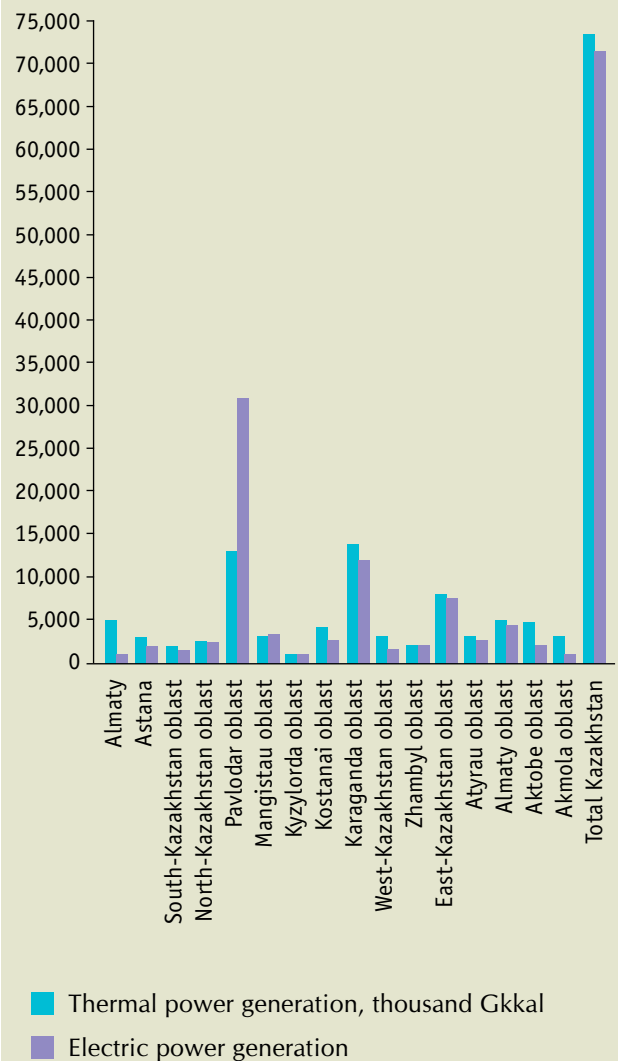
The power engineering Programme of the RK as of 2030 stipulated an increase of the electric power consumption in the socially oriented sphere by 25% as of 2015<sup>94</sup> with a decrease of this indicator in industry. In reality, the trend toward growth in energy intensive industrial sectors has become more obvious in recent years. Oil and gas companies, coal-mining and metallurgical sectors invest into building an electric supply network infrastructure, while large energy intensive production companies develop their own power generation supplies.

The annual increase of electric power consumption in Kazakhstan makes up around 6% and in 2008 it is expected to make 82.0 milliard KWT/hour with the existing capacity of electric power generating facilities of 80-84 milliard KWT/hour.

Given that real preconditions for an electric power deficit in Kazakhstan are in place, the Government of the RK is undertaking urgent measures to enhance the energy sector. According to the Action Plan of power system development in Kazakhstan for 2007-2015, approved by the Prime-Minister's decree №147-p of 31.05.2007, existing power gener-

**Graph 7.1.**

Thermal power generation in Kazakhstan in 2006



Source: Developed based on the data of Annual Statistic Yearbook of Kazakhstan. 2006.

ation facilities will be upgraded and new power generation facilities as well as the National and regional electric network company facilities will be built<sup>95</sup>. The increase in the power generating capacity of the Republic will result in a considerable increase of the man-caused load for the environment and man.

<sup>94</sup> Power engineering Programme in the Republic of Kazakhstan as of 2030.

<sup>95</sup> Presentation of the President of the JSC "KEGOK" Mr.K.Bozumbaiev at the Eurasian Energy Forum, 2007.

## Greenhouse gases (GHG)

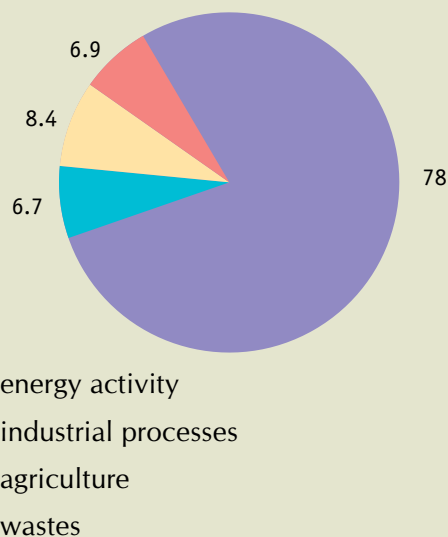
With regard to GHG emissions, Kazakhstan takes first place in Central Asia and third among former Soviet Union countries. In 2005, general gas emissions with direct greenhouse effect in the RK made up 240.7 mln. tenge in conversion to carbon dioxide. Part of the emissions has been absorbed by forestry and land tenure sectors (5.9 mln. tenge)<sup>96</sup>.

The major source of GHG is the energy sector; the second biggest source is agriculture. Emissions under the category “wastes” keep on growing, which is due to the growth of accumulations of industrial and household wastes in the Republic.

Total emissions of GHG from all sources decreased as of 2000, then there was growth and in 2005 they made up 73% of the level of 1990. GHG emissions per capita made up 15.2 tons or 41.5 per 1 mln. tenge of GDP.

**Graph 7.2.**

Contribution of the sources of GHG emissions to the general emission 2005



Source: Information bulletin on the status of environment of RK 1(87), 2007. MEP RK.

**Table 7.3.**

General gas emissions with direct greenhouse effect in the RK, mln. tenge, CO<sub>2</sub>-equivalent

Category of sources (Intergovernmental Panel on Climate Change)	1990	1992	1994	2000	2005
Carbon dioxide	238.3	261.2	243.7	137.3	186.3
Hydrocarbons	64.0	57.8	46.3	33.9	42.7
Nitric oxides	27.0	25.1	17.6	9.0	11.7
General emissions	329.3	344.1	307.6	180.2	240.7
Net-emissions (sources minus drainage)	321.2	336.9	302.7	173.1	234.8

Source: Information bulletin on the status of environment of RK 1(87), 2000. MEP RK.

<sup>96</sup> Information bulletin on the status of environment of Republic of Kazakhstan. Issue 1(87), 2007. MEP RK.

## Use of ozone-depletion substances (ODS)

Kazakhstan is one of 191 countries that ratified the Vienna Convention on ozone layer depletion and the Montreal Protocol on ozone depletion substances. The Republic does not produce ODS but imports them as refrigerating media, in aerosols, fire fighting products and construction foams. According to the data of the survey initiated by the MEP of the RK, the depth of the ozone layer over Kazakhstan in winter and spring goes down by 7% and in autumn – by 8%. It has been determined that East and Central Kazakhstan are the regions with high risk of incidence caused by such abnormalities as well as the Almaty oblast.

In recent years Kazakhstan has made serious steps towards limiting the use of ODS. The system of licensing ODS import and export was introduced in the Republic in 2004 and in 2005 import of a number of regulated substances was banned. With the support of the

MEP RK, customs bodies received special devices to be able to control ODS importation. A number of enterprises and companies that have used ODS in their technological processes earlier were supplied with a new type of equipment. In the Emergency Situation Agency's research centre a gallon bank has been set up with the aim of their recycling ODS. It is the only such facility in Central Asia. Data pertaining to the volume of ODS use, import and export is collected, processed and analyzed<sup>97</sup>. The volume of ODS consumption decreased during 2000–2005 by more than ten times (597 thousand tenge and 46 thousand tenge respectively)<sup>98</sup>. On June 18, 2007, the Government of the RK passed a Resolution «On Endorsement of the Licensing Rules for Import and Export of ODS and Products Including ODS, for Works with the Use of ODS, and Repair, Assembling, and Maintenance of Ozone Depletion Substances».

## Problems

The trend to boost the anthropogenic impact upon the environment in industrial regions and megapolises of Kazakhstan is sustaining. Long-term extensive use of natural resources in industry and agriculture without the implementation of necessary measures on monitoring, conservation and recreation in many cases resulted in their loss.

The high power intensity of production and increase in the capacity of coal-based power stations may entail environmental disaster in energy generating regions of the country. Almost no examples of energy-saving technologies are to be found in the production sector, in transport, in construction or utilities sectors. Regardless of mandatory EIA implementation in Kazakhstan, in the course of industrial designing, such works are not normally done when working out regional and sector development

programmes. The level of development, financing and especially control over the implementation of nature conservation programmes is still low.

Steppe fires that cause considerable loss to forests and SPA territories are still a huge environmental challenge. Increase in the volume of industrial and municipal wastes entails a stable growth of GHG emissions.

As of now there is no effective system of environment quality management. Sector coordination between nature conservation bodies, production environmental agencies and respective research institutions is not yet in place. The shortage of coordinated statistical information hinders the procedure of tracing and analysis of environmental indicators necessary for strategic forecasts and decision-making in the field of environmental protection.

<sup>97</sup> Web-site of the MEP RK, <http://www.nature.kz>

<sup>98</sup> Coordination Center on Climate Change, 2006, [www.climate.kz](http://www.climate.kz)

## CONCLUSION

A sub regional ecosystem approach is among the major principles of the transition to sustainable development declared and included into Kazakhstan Agenda-21. It stipulates the introduction of a set of limitations, regulations and rules of economic activity that define permissible limits of the use of natural resources and ensuring balanced environment quality management.

The lack of an ecosystem approach to implementation of the national strategies of environment management is a major problem of Kazakhstan with regard to achievement of environmental sustainability. It is important to address problems on restoration of SPA, forests, on reduction of greenhouse gas emissions, and the introduction of energy efficient technologies taking into account all the related economic, ecological and social aspects.

For example, the high power intensity of the production sector in Kazakhstan is the cause of irrational use of fuel and mineral-raw-material natural resources, growth of the volumes of industrial wastes, and air and water pollution, which inevitably cause deterioration of the social and living conditions of the population. It is necessary to implement industry technical upgrading on the basis of energy saving principles and high-tech productions with a mandatory introduction of a system of economic incentives. An effective waste management system should be in place. To reduce the volume of ODS emissions into the air, technologies aimed at multiple use of Freon should be

in place and attention should be given to the development of innovative production without the use of ODS.

It is necessary to boost the activity on reforestation and restoration of SPA that are of priority importance for biodiversity conservation. To assess the real situation related to Target 9 and to bring up the efficiency of management of protected areas, additional indicators should be introduced – endangered species out of the total number of species, %, and degree of reforestation, sq. m/year, endorsed by the WB and UN CSD. The indicator endangered species will also make it possible to follow the status of the national aquatic areas that have been experiencing strong environmental stress in recent years (for example, in conditions of oil production in the Kazakhstan Sector of the Caspian Sea).

To ensure a reliable statistical data bank, it is necessary to reorganize the system of information collection, which should involve not only the Agency for Statistics of the Republic of Kazakhstan, but also sector and independent environmental subdivisions with mandatory submission of environmental reports on environmental pollutants by companies.

Any citizen of the country is welcome to make a contribution to the achievement of Target 9 on biodiversity conservation, on reforestation, energy saving, and refusal to use products containing ODS. To foster environmental responsibility in the people, it is necessary to boost educational activity and study of local lore, to improve the system of ecological education, and to organize the dissemination of thematic and popular science publications, etc.

## Target 10. Halve, by 2015, the proportion of people without sustainable access to safe drinking water

Progress in achieving this target is assessed based on the following indicators:

- ♦ Proportion of population with sustainable access to an improved water source

In terms of water supply, Kazakhstan takes the last place among CIS countries. Runoffs of the majority of large rivers form outside of the Republic, which results in its dependence on neighbouring countries. The specific water supply of the territory makes up 37.0 thousand cubic meters per 1 square km, or 6.0 thousand cubic meters per person per year<sup>99</sup>.

The stable growth of the domestic fresh water consumption volume was registered in 2002–2006<sup>100</sup>. During this time, the average daily release of water per person decreased from 64 l/man in 2001 to 58 l/man in 2005<sup>101</sup>.

Access to drinking water is 95.2% in urban areas and 57.2% in rural areas<sup>102</sup>. 23.2% of the population in the RK did not have access to drinking water in 2006 compared to 24.9% in 1999. Given the very slow implementation process of Target 10 – Half, by 2015, the proportion of people without sustainable access to safe drinking water, – it should be expected that it will not be achieved in time.

Depreciation of fixed assets of water supply and sewerage in the majority of settlements of the Republic makes up 40–70%, in some – up to 100%. Currently almost a quarter of the population of the RK uses water for drinking and domestic needs which does not meet the criteria of sanitary safety – out of house and public water pumps, wells, surface sources and also delivered water. The proportion of non-standard water samples out of decentralized sources very often make up 45–55%, while the average republican level is 21.5%.

The current status of water drain systems in rural settlements is considered to be unsatisfactory, as access of people to sewerage systems is difficult to register. 124 settlements with the total population of 747,481 people have been registered as rural settlements with 689.01 km of sewerage networks and 26 sewerage treatment plants<sup>103</sup> since the beginning of 2007.

The aim of the sector programme «Drinking Water» adopted in 2002 was to ensure drink-

**Table 7.4.** Fresh water use, mln. cubic meters

Years	2002	2003	2004	2005	2006
Total	14,930	15,242	20,204	21,422	18,442
Including irrigation, watering and agricultural water supply	10,590	10,573	12,021	11,329	10,897
Production needs	3,710	3,983	4,442	4,062	4,419
Domestic fresh water supply	600	601	621	694	698

Source: *Statistic Yearbook of Kazakhstan. 2007.*

<sup>99</sup> The Programme of achievement of MDG by the Republic of Kazakhstan on water supply and sanitation as of 2015. (Draft), CWR, Ministry of Agriculture of the RK, 2007.

<sup>100</sup> Yearbook of Kazakhstan, 2007.

<sup>101</sup> Yearbook of Kazakhstan, 2006.

<sup>102</sup> The Programme of achievement of MDG by the Republic of Kazakhstan on water supply and sanitation as of 2015. (Draft), CWR, Ministry of Agriculture of the RK, 2007.

<sup>103</sup> The Programme of achievement of MDG by the Republic of Kazakhstan on water supply and sewerage as of 2015. (Draft), CWR, Ministry of Agriculture of the RK, 2007.

**Table 7.5.** Access of the population of the RK to drinking water as of 01.01.2007

	Number		Access to drinking water		Access to Sewerage	
	People	%	People	%	People	%
Population						
Urban	7,867,170	51.5	7,485,683	95.2	5,050,022	64.2
Rural	7,396,739	48.5	4,234,258	57.2		
Total in the RK	15,263,909	100.0	11,719,941	76.8		

Source: Based on the materials of the Programme of achievement of MDG by Kazakhstan in water supply and sanitation as of 2015.

ing water for the population in the necessary volume and of guaranteed quality. 77.2% of the rural population in the country will get access to quality drinking water by the end of 2010 provided adequate programme financing. The Government Programme of rural territories development for 2004-2010 is being implemented, which includes construction and reconstruction of water supply systems within its framework.

## Challenges

Achievement of Target 10 seems to be pretty much problematic given a number of challenges, the most important of which is the technical inadequacy of water supply and water irrigation systems. The situation is aggravated by the actual lack of water economy policy: the specific use of water for domestic drinking needs in the cities of the RK exceeds this volume in Western European countries by 1.5-2 times.

The sector experiences serious institutional problems due to the lack of respective departments in charge of water supply and water irrigation within the structure of the Government. There is no unified economic approach to managing infrastructure of water supply and sanitation as well as rural municipal services. The shortage of complete and reliable information from the sites hinders timely technical, legal and financial decision-making and control over the implementation of these decisions.

## CONCLUSION

It is necessary to ensure a complex approach that would take into account interests of water users and the issue of its rational use, according to evidence-based global norms and advanced systems of control over water consumption.

Technical sector upgrading, introduction of state-of-the-art technologies of drinking water treatment and supply, as well as water drains and treatment of runoffs should be given priority significance. It is necessary to ensure efficiency of capital investments when designing the construction and reconstruction of water supply and water drainage systems. To support technical status and repair of the networks it is necessary to have a developed system of service agencies that would be vested with legal and financial authorities, probably in the form of a vertically integrated structure.

It is important in the near future to meet the needs of the regions that experience a critical deficit of drinking water and to restore potentially dangerous water supply and water drainage systems with a wear out rate up to 50-70%.

Issues of rational use and protection of water resources from pollution and depletion are topical too. Besides measures on updating environmental legislation, regulation, recording and control of water consumption, it is necessary to develop understanding and to contribute to the organisation of environmental actions targeted at upbringing civil liability for conservation of vital natural resources.

## Target 11.

### Achieve by 2020 a significant improvement in the lives of at least 100 million slum dwellers

For Kazakhstan Target 11 is to have achieved by 2020 a significant improvement in the lives of the rural population residing in the most unfavourable social, housing and ecological environment.

Progress in achieving this target is assessed based on the following indicators:

- ♦ Proportion of households with access to tenure, owned or leasehold
- ♦ Proportion of the population having access to improved sanitation systems.

### Status

Average housing of the population during the last ten years has been stably increasing; apartment houses have been built predominantly in urban areas. In 2006 housing exceeded the same indicator of 2002 by threefold. In January–July of 2007, the volume of investments into the housing construction of Kazakhstan made up 160% for the same period of 2006<sup>104</sup>. The ratio of 18.9 square meters of housing per urban citizen was achieved as of the end of 2006 against a standard social norm of 18 square meters, and in rural areas 15.9 square meters (in 2002 – 18.0 and 15.8 square meters, respectively)<sup>105</sup>. In 2004–2006 a reduction of the general housing area took place, which

was made up of 98,903 thousand square meters<sup>106</sup> as of January 1, 2007.

Newly built rural houses, as a rule, are not equipped with modern amenities: only 16% of houses have access to sewerage, 26% are equipped with running water, and 1% has centralized heating<sup>107</sup>. An increase of the share of total housing facilities connected with sewerage systems in 2006 is determined by mass municipal construction with a high level of comfort.

In May 2007, on the average in the Republic the price of new housing per 1 sq. meter increased by 1.5 times compared to 2006, and the resale price of housing equipped with modern amen-

**Table 7.6.** Basic indicators of housing conditions

Years	2002	2003	2004	2005	2006
Average housing of the population, square meters of total area per 1 person, including:	16.6	17.0	17.3	17.5	17.6
Urban area	17.3	18.0	18.4	18.7	18.9
Rural area	15.6	15.8	15.9	16.0	15.9
Housing accomplishment rate, %:					
Water supply	52.4	52.8	53.5	54.4	54.9
Sewerage	43.1	43.3	43.7	44.6	54.0

Source: *Annual statistic Yearbook of Kazakhstan. 2007.*

<sup>104</sup> Yearbook of Kazakhstan, 2007.

<sup>105</sup> Statistic indicators of social and economic development of the Republic of Kazakhstan and its regions, №7, January-July 2007.

<sup>106</sup> Monitoring of aul (village) development. Quarterly statistic book for January-December 2006.

<sup>107</sup> Yearbook of Kazakhstan, 2007.

ities increased by 1.7 times. Prices and tariffs for housing and utilities have increased<sup>108</sup> too.

According to formal data, the governmental housing programme is being implemented ahead of the schedule by 30%. 11 mln. sq. meters of housing were built in 2005-2006 within the framework of the programme, and 7 mln. sq. meters will be commissioned in 2007. However, practically all the population strata feel a shortage of housing; many people are not covered by the housing programme.

The government decided to develop satellite cities around megapolises of the Republic. There are 20 functioning centres of social rehabilitation of homeless people. In 2008, centres for adaptation and integration of oralmans will be set up, possibility to provide them with housing on social lease terms and individual housing construction will be considered<sup>109</sup>.

## Problems

Experts note considerable growth of housing poverty in Kazakhstan (more and more people cannot afford housing) with an insignificant reduction of consumer poverty<sup>110</sup>. «Housing poor» people make up 28% of the country population and basically reside in rural areas. Regions with a high poverty level and limited access to housing amenities are: Kyzylorda, Mangistau and Atyrau.

The situation with illegal housing construction and formation of slums in the suburbs of big cities has been aggravated. Their inhabitants are not registered, do not have a chance for employment, and do not have access to basic services (drinking water, health services and education). The problem of the housing supply is closely linked with the processes of labour and ethnic migration. The inflow of oralmans to the Republic is growing every year.

The construction season of 2007 was noted by the dramatic increase of prices for all construction materials, which resulted in the housing cost increase. Major reasons for this situation are: technologically outdated production of construction materials and lack of strategic sector planning.

## CONCLUSION

The target to increase the proportion of households with access to tenure and proportion of the population having access to improved sanitation systems is closely linked with the problem of improvement of living conditions of the poor population. When addressing this problem, all aspects of poverty elimination, ensuring access to primary education, health services and guaranteed employment should be taken into account.

Complex and balanced measures should be undertaken to control issues of illegal housing construction. In gender terms, unfortunate housing situations directly influence social and economic positions of women, their opportunities to get employment, to raise healthy children and to remain full-fledged society members.

Labour and migration policies have to be aimed not only at the creation of additional work places but at ensuring proper work conditions for workers and their families.

<sup>108</sup> Statistic indicators of social-economic development of the Republic of Kazakhstan and its regions, №7, January –July 2007.

<sup>109</sup> Report of the Prime-Minister of the RK K.Masimov «On Governmental Programme for 2007-2009» at the joint meeting of the Chambers of the Parliament RK, 2007.

<sup>110</sup> International Eurasian Institute of Economic and Political Studies, 2005



# MDG 8. DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT



The international discourse on development paradigms pays much more attention in the last decade to partnerships at the national level and in the international arena and how the concept of “global partnerships” develops. It is recognized that the Government, at the country level, can gain a lot through its active dialogue and mutually beneficial relationships with private sector actors and with civil society. In the international marketplace, the role of international and regional organisations for dialogue and as a mechanism for advancing the country’s interests is well known. It is also recognized nowadays that the country can progress more quickly toward achieving its development objectives and goals through partnerships. Similarly, sustained economic development may lead to innovative models of partnerships.

Kazakhstan nowadays is ahead of most of the CIS countries in overcoming the challenges of transition and developing political, economic and social institutions. The country’s development is guided by the long-term strategic framework of the Kazakhstan 2030 strategy, complemented by a number of more specific sector strategies and plans. A key theme of the long-term strategy is the country’s competitiveness – Kazakhstan aims to become one of the 50 most competitive economies in the world. In the Global Competitiveness Index of the World Economic Forum, Kazakhstan is in 56<sup>th</sup> place. In 2006 the index of macroeconomic stability of the country turned out to be the most highly valued one (10<sup>th</sup> place). However, other factors of the country’s competitiveness have been assessed rather modestly. Particularly as

far as development of institutions is concerned, Kazakhstan is in 75<sup>th</sup> place, infrastructure 68<sup>th</sup> place, health care 86<sup>th</sup> place, innovations 70<sup>th</sup> place, technologies 66<sup>th</sup> place, higher education 51<sup>st</sup>, and business 72<sup>nd</sup> place.

The partnerships Kazakhstan is engaged in and continues to develop are determined by its growth pattern. This chapter examines two groups

of partnerships: the first group includes the relationships that Kazakhstan develops on the international arena with international organisations (including donor and financial ones), and in international trade and finance. The second group includes the in-country relationships (including partnering) of the government with the private sector and the civil society organisations.

## Partnership with international donor and financial institutions

The integration of Kazakhstan into the global economic system has been done through building constructive and mutually beneficial relations with important subjects of the global economy – international organisations. The President of the Republic of Kazakhstan, N. Nazarbayev, played an important role in this area having boosted interaction of Kazakhstan with leading financial and economic institutes of the present day world. The country's participation in the activity of such structures contributes to the enhancement of its position in the global market, and of its foreign trade and inflow of financial resources into the country. Involvement in the system of general regulation of international economic relations will make it possible to accumulate useful experience of external economic cooperation within the framework of regulations and rules generally accepted by the international community.

From the point of view of financing economic reforms by taking loans and credits for the implementation of special projects aimed at the development of individual sectors of the national economy, Kazakhstan gives priority to cooperation with such international organisations as the United Nations' Agencies, International Monetary Fund, World Bank Group, European Bank for Reconstruction and Development, Asian Development Bank, Islamic Development Bank, World Trade Organisation and also to active participation in the World Economic Forum in Davos.

One hundred fifty one organisations of international status function in the Republic, including 48 international organisations, 28 public organisations, and 75 international non-governmental organisations and funds. It has to be mentioned that in the last several years the

representative offices of many donor organisations have either finished or significantly restructured their work in Kazakhstan. This is a sign that the country has overcome common donor assistance programmes, and its development needs are currently much more focused on specialized and advanced knowledge and experience. The World Bank and USAID have concluded joint programmes with the Government to address the new development challenges. The United Nations Agencies have had a close partnership with Kazakhstan since independence. The various UN Agencies have assisted the Government with formulating policies and building national capacities. As Kazakhstan enters into a new stage of development, the UN and the Government are reviewing how to forge a new partnership for the future.

The Ministry of Economy and Budget Planning, as the coordinator of development work and coordinator for development organisations, has the capacity and mechanisms in place for regulating and identifying needs for projects and programmes, and for internal coordination formulation, implementation and monitoring processes. The Ministry of Foreign Affairs has announced an interest in having Kazakhstan become a new donor to the region in the near future. The country is already an active player in various regional cooperation initiatives.

Multilateral Development Banks are non-commercial organisations, the activity of which is targeted at resolution of social-economic problems of countries-beneficiaries. They assist in economic development and poverty reduction through the provision of credits, grants, guarantees, technical assistance and also advisory services. At the same time, Multilateral

Development Banks make their focus on the provision of long-term resources. The Eurasian Development Bank set up in 2006 has good activity perspectives, especially given its relations with EurAsES – the most successful of the existing integration groups in the post-Soviet space. As of today, only Russia and Kazakhstan are shareholders of the Bank with the authorized capital stock 1.5 bln. (the share of Russia

– 1 bln. US Dollars, Kazakhstan – 500 mln. US Dollars). In June 2006 the Bank started its activity. In November, the Fitch Agency awarded it the opening rating at the level of the Russian sovereign one (BBB+). Expansion of the Bank shareholder pool at the expense of other EurAsES members will contribute to its efficiency within the context of economic integration.

## Trade and financial policy as a part of Kazakhstan's international partnerships

International institutes (World Trade Organisation (WTO), International Monetary Fund (IMF), World Bank (WB), Organisation for Economic Cooperation and Development (OECD) and others play an important role in international trade and influence national trade policy. An indirect trade policy macroeconomic goal is general economic growth and employment growth, which requires its harmonization with industrial, investment and social-economic policy. External policy, while influencing micro- and macroeconomic processes, is closely linked with the general state economic policy, and consequently the most general goal of its foreign trade policy is effective economic growth.

Foreign economic policy contributes to the country's integration into the global economic system and to protection of the interests of exporters. The Government of the RK has identified and implemented some practical steps, like:

- ♦ reduction of the list of quoted exported and licensed goods;
- ♦ creation of internationally recognized system of certification and quality control of export-oriented produce;
- ♦ attraction of foreign investments to the RK on mutually beneficial terms;
- ♦ formation of a unified economic space within the framework of CIS, where production will develop effectively in conditions of market economy, goods, services, capital and work force freedom of movement.

Kazakhstan began its negotiations on WTO accession back in 1996. The Ministry of Agriculture of the Republic of Kazakhstan during its negotiations on WTO accession insisted on

small direct support of this sector in the size of 1.38 bln. US Dollars a year, which has been determined given the basic level of 1994–1996, and this has been repeatedly discussed at multilateral negotiations. In the course of the next 10 years such assistance will have to be reduced by not less than 13%. It is important to point out that in the Republic of Kazakhstan the level of governmental support to agriculture is much less than in developed countries of the world. In recent years resources for these purposes were close to – 0.4% of GDP, while in Hungary – it is 1.8%, in Japan and EC – 1.7%, in Czech Republic – 1.6%, in the USA – 1.5%, in Canada – 1.3%, in Russia – 0.8%, in the Ukraine – 0.5%. Subsidies per capita in Japan made up 566 US Dollars, USA – 350, EC – 336, Canada – 163, Hungary – 111, Chechnya – 100, Russia – 60, in the Ukraine – 33 and in Kazakhstan only 28 US Dollars.

The Council of Foreign Investors under the President of the Republic of Kazakhstan was established in 1998. Subsequently, Law on Investments was adopted; a number of inter-governmental agreements on promotion and mutual protection of investment and on the elimination of double taxation, etc. were signed. In 1997, a list of priority sectors for investment attraction was defined. It included processing industry, objects of the new capital in Astana, the social sphere, tourism and agriculture. In 1993 “Chevron” corporation came to Kazakhstan, which was sort of a signal to other transnational corporations. Investors were active in joining the oil and gas sector of the Republic. Today jumbo global oil and gas companies work in Kazakhstan. Among them

«Exxon Mobil», «Shell», «Eni», «Chevron Texaco», «Total», «British Petroleum», «Lukoil», and the Chinese national oil corporation. The total volume of direct foreign investments attracted to the Republic during the period of 1993 and as of the second quarter of 2006 exceeds 46 bln. US Dollars.

Kazakhstan was the first country of the former USSR to get country rating of investment level on liabilities in foreign currency in 2002 (Moody's Investors Services) and in liabilities in the national currency in 2003 (Standard & Poor's). Involvement of big foreign investors made it possible to attract world-class management, which in many instances contributed to rehabilitation of national industrial companies.

Deepening reform targeted at further enhancement of the national banking sector and involvement of individual financial resources into investment processes took place in the financial sphere. Major outcomes of the reforms implemented were: creation of a modern banking system, development of payment systems, insurance sector development, transition to accumulation pension system and stock market formation. The National Bank of Kazakhstan has been consistently introducing of interna-

tional standards into the financial sector of the Republic of Kazakhstan.

Since 2001, targets of monetary and credit policy are determined by the National bank for three years in advance with annual amendments for the achievement of macroeconomic stability. A developed banking system ensures the growth of the individual savings and flow of credit resources to attractive economy sectors. Launch of the full-fledged securities market is linked with the currency policy implemented by the Government including the formation of institutional investors in the face of pension funds accumulation and state securities sector development. Expansion of the insurance sphere and introduction of ecological insurance stimulate further growth of the insurance sector.

Implementation of sustainable fiscal policy has been achieved to a great extent due to the creation of the National Fund of the Republic of Kazakhstan, which was estimated to accumulate about 20 bln. US Dollars by the end of 2007. This national fund has become an important instrument of macroeconomic stability in the country created from a portion of revenues from internal turnover, which have been obtained due to high global prices for oil and metals.

## Partnership between the state and private sector in Kazakhstan

The current stage of quality transformations in the Republic are related to the development of the partnership between the state and the private sector. Today there are five major functioning mechanisms of this partnership – concessions, joint financing investment projects, investment preferences granted by the government, and the creation of production infrastructure and business corporations.

Concession mechanisms are an area of great potential. Development institutes are accessible and active compared to private investors due to budget resources. Another effective mechanism of public-private partnership is granting investment preferences – business and the state take mutual obligations. Business contributes investments; the government exempts it from a number of taxes and dues and

also may provide grants in terms of land plots, fixed assets, etc. Special economic zones are a «mix» of several mechanisms. On the one hand, the state covers a part of businesses expenditures for putting up new production by way of allocation of a land plots and providing all necessary communications and services. Businesses save time and money for design and construction, while the state develops either the region or the sector. On the other hand, in FEZ there are tax remissions that attract investors. As of today there are four special zones in the country – «Sea Port Aktau» in Mangistau oblast, «Astana – a new city» in Astana, «Information Technologies Park» in Almaty and FEZ «Ontustyk». Soon five more economic and a number of industrial zones are to be organized, which will be transferred to SBC in line with the original idea of their organizers.

SBC represents regional development institutes that manage the assets transferred in respective regions of the country and plays the role of generator of projects that attract investments for their implementation and promote the image of economic development of the regions. Since 2007, the Government has formed a new partnership between the government and private sector of the regional (territorial) level – specifically to creation of 7 social-business corporations: Caspian (with the centre in Atyrau), Uralsk (Aktobe), Zhetysu (Almaty), Sary-Arka (Karaganda), Irtysh (Ust-Kamenogorsk), Southern (Shymkent), Northern (Kostanai). The first experimental SBC «Saryarka» has been set up in the Karaganda oblast. Based on the analysis of the activity of «Saryarka» corporation in 2008 there will be draft law developed a «On SBC Activity».

Judging by the information of the Ministry of Finance of the Republic of Kazakhstan as of January 1, 2007 shares of 131 stock companies (SC) are in state ownership as are market shares in 24 Limited Liability Partnerships (Ltd). Seven JSC are in trust asset management. Besides that, in 2006 14 joint stock companies were set up within the framework of implementation of a number of resolutions of the Government of Kazakhstan. For the sake of effective and professional management of strategic state assets that ensure sustainable economic gains and implementation of strategic objectives for

development of the country economy JSC «Kazakhstan Holding on State Asset Management «Samruk» was set up in April 2006.

Development institutes have been set up to work over the implementation of projects worth 6 bln. US Dollars. The Modern Park of Information Technologies opened up in Almaty, in which 11 of the biggest world companies dealing with information technology will work. These companies will not only manufacture products, but will annually train 200 local specialists.

Development institutes JSC «Development Bank of Kazakhstan», JSC «Investment Fund of Kazakhstan», JSC «National Innovation Fund», JSC «Small Business Development Fund», JSC «State Insurance Corporation on Insurance of Export Credits and Investments» and JSC «Centre of Engineering and Transfer of Technologies» work over financing together with private investors of perspective high-tech projects and take part in setting up basic elements of innovative infrastructure (techno parks, business-incubators, technopolises). As of January 1, 2006, the portfolio of investment projects of these institutes consisted of 130 projects authorized for financing for the total sum of 3,263.5 mln. US Dollars, which exceeds similar indicators of 2004 by more than twofold. Funding of 90 projects with the total cost of 2,222 mln. US Dollars was initiated with participation of development institutes – 725.1 mln. US Dollars.

## Development of information-communication technologies as a component of the partnership between government and the private sector

Information legislation of Kazakhstan includes 300 regulatory acts and basically reflects global trends of development of information processes and provides conditions for further development of the application sphere of ICT meeting international standards.

While developing ICT, it is necessary to bear in mind that with the decrease of prices on computer equipment major profit will be concentrated not on computer equipment production, but in the area with steady growth of user costs – in the sector of software, services and consultations.

With regard to the informatization level of CIS countries, Kazakhstan is in the third place next to Baltic countries and Russia. Following the UN assessment for 2002, Kazakhstan is in 62nd place on the global level. The number of users of information technologies in the Republic of Kazakhstan has increased from 42 thousand in 1997 to 141 thousand in 2001; in 2006 the ratio of man/computer was 100 to 5.1.

Sector programmes on computerization/informatization of public and municipal bodies, research and education systems, non-government-

tal sectors and mass media have been devised in the Republic of Kazakhstan. A list of priority budget investment projects (programmes) for 2007-2009 has been endorsed by the Resolution of the Government of the Republic of Kazakhstan № 395 of 21.05.2007 and specifically by its Section 5. It includes The State Programme of "electronic government" formation in the Republic of Kazakhstan for 2005-2007.

Participation of Kazakhstan in international

organisations which do the most important work on ICT development in different applied directions (UNESCO, ITU, World Information Technologies and Services Alliance (WITSA), European Organisation of Information Technologies and Services (EISA), International Council on Information Technologies and Public Administration (ICA) and others) will make it possible to learn from global experience, to attract investments and in general to boost ICT development in the country.

## Youth policy, especially in the sphere of employment, as a direction for partnership between government and the private sector

Competition in the labour market has enhanced the process of segmentation and age discrimination, which is proved, specifically, by the presence of a youth labour market. Strengthening and developing legal, economic and organisational conditions for civic consciousness formation and self-actualization of young people are priorities of the state policy for the youth labour market.

The principal legislative base for the problems of youth development was adopted in 1991; basic provisions deal with vocational education and youth placement in the labour market and the role of social protection for young people. Apart from the laws already in force, international agreements play the role of social-labour regulators. In 2001 some of the Conventions of the International Labour Organisation were ratified, specifically «On Policy in the Sphere of Employment» and «On Organisation of Placement Service».

In the last few years the policy of youth employment has been reoriented toward the attraction of private investments into education and expansion and development of the system of staff retraining given the needs of the economy. Targets of youth employment are implemented via the programme of population employment (2005-2007), the youth employment policy (2005-2007) and Programme "Zhasyl Yel" (2005-2007), which are financed out of the budget. The youth employment policy for 2005 -2007 supports the development of skills

via practice and other initiatives and supports youth business undertakings – 26 centres of social support will be open in oblasts and consultation services will be provided to 2 million young people.

According to the data of the Agency for Statistics of the Republic of Kazakhstan for 2007 the share of unemployed among young people at the age of 20-24 constituted 15.2% of their total number.

Increasing youth employment in rural areas is achieved basically due to social order projects. Such projects include professional training workshops, centres for young people. etc. They also support self-employment and youth entrepreneurship. Young businessmen do not enjoy tax remissions.

According to the national employment programme for 2005-2007, measures for young people include employment of graduates through a number of mechanisms and other special measures, including: contracts between employers and students, practical work with potential employers, state seconding of graduates to organisations and companies in which the state share makes up 50% and more and also monitoring employment of graduates. 182.3 mln. tenge has been spent for practical work, including: in 2005 -43.6 mln. tenge, in 2006 -59.8 mln. tenge, in 2007 -78.9 mln. tenge.

## Ensuring equality and access to employment

As of today equal access to employment among men and women is stipulated only on a strategic level, specifically in the Strategy of Gender Equity for 2006-2016. It is necessary to point out that the principal priority of state policy and approach of the legislation in force is ensuring safe conditions and labour protection of women. Legislation in the field of social protection ensures opportunities for employment for disabled people; local authorities have to establish quotas for disabled people and support small and medium businesses that create jobs for disabled people and also ensure vocational education for them.

Measures undertaken in Kazakhstan on promotion of employment and job placement of young people are basically oriented at people under 21 years of age. Young people including those with tertiary and secondary special education do not have the necessary professional experience and skills (According to 2005 data of SARK 20.35% of unemployed people is in the age group of 20-24).

Youth practice and other measures of support in getting vocational and labour experience while getting tertiary and secondary special education are aimed at elimination of the aforementioned problem with employment and job placement of young people.

Among many causes of unemployment the following should be highlighted: firstly, low efficiency of legislative and regulatory acts in the sphere of employment and social protection of young people is an issue. Secondly, the formation of the social and economic environment, contributing to active involvement of young people into the labour sphere, is very low. Thirdly, there is low competitiveness of young people in the labour market. All of these make the problem of youth employment pretty much topical and employment services have to cope with the huge scope of work related to youth unemployment. 77.5 thousand young people at the age of 16-24 applied for a job in 2001, out of which 31.8 thousand or 41.0% have been employed. In 2007 these numbers were 66.5 and 58 thousand (87.3%) respectively.

Employment opportunities are different in different regions of the Republic. For example, in Atyrau oblast out of the total number of school graduates that applied for assistance in getting placement only 17.4% got jobs while in Karaganda oblast 96.2% of those seeking work have been employed.

Currently periodical contradictions between the labour market and the education system are becoming a serious problem. The market demands experienced workers, and graduates of secondary and higher schools within this context are overlooked by employers. In 2007 out of the total number of unemployed in the Republic 8% were unable to find jobs after graduation from school (including 42% of men and 58% of women). While 54.9% of the urban population suffers unemployment after graduation from school the same situation is suffered by 45.1% of the rural population.

Due to education system reform, the dramatically increasing number of private schools and manpower training has become unregulated, and the proportion of training specialists in different educational levels has been distorted. If in the 1996-1997 academic year the proportion of high school students per 10,000 of the population made up 179 and college students 113 per 10,000 of the population, then in the 2000-2001 academic year the number of high school students increased to 295 people or by 1.6 times while the number of college students decreased to 112 people. At the labour market there are too many specialists with tertiary education, while reduction of mid-level specialists does not meet the growing need for them in different economy sectors.

State accreditation of high schools is being introduced within the framework of on-going education reform, with the aim to improve the quality of higher education and establish a network of high schools, bringing the structure of educational services in compliance with the structure of demand in the workforce. Labour exchanges or labour registry offices are set up as institutes of market infrastructure.

## Cooperation and dialogue of civil society and government

Civil society organisations have an important role in society, serving as a middleman between the government and citizens; they undertake many functions of social change, addressing various social challenges such as the environment, increasing the role of women in society, consumer rights, youth issues, single mothers and mothers heading extensive families, and aiding special populations like orphans, the disabled, and victims of illegal repression, etc. In Kazakhstan the mechanism of social contracting started to function several years ago; dedicated allocations from the state budget are directed for grants for non-governmental NGOs for the implementation of socially important initiatives in various areas.

Today there are many examples of the effective participation of civil society in political decision-making. The unique model of partnership between the “third sector” and government is built within the framework of the Civil Society Forum. Despite initial concerns, the Chamber of Public Experts under the Majilis, developed and institutionalized with UNDP support, proved its effectiveness in providing for public participation in parliamentary decision-making. For the last two years the Chamber has prepared more than 50 amendments to National Legislation that

served as a basis for 12 laws related to socially important areas endorsed by the Parliament. All experts of the Chamber serve on a voluntary basis without any financial remuneration. Moreover, many regions, often with support of UN agencies including UNESCO and UNICEF, have various functional mechanisms of two-way communication, such as public hearings and web-portals which allow the public to actively communicate with administrative and representative authorities on all levels. Endorsement of the Concept of Civil Society Development for years 2006-2011 demonstrates once again the important role of civil society in the further development of the country as a dynamic state with a high standard of living. The Concept includes volunteering as one of the effective mechanisms in meeting social challenges. Kazakhstan volunteers contributed almost 3 million hours estimated at value of \$780 million according to an unscientific estimation. Kazakhstan plays an important role on the international arena to support volunteering. Along with four other countries, the Republic initiated a UN resolution 57/106 to follow up to the international year of the volunteer to support volunteerism as a strategic tool to enhance economic and social development.



## CONCLUSION

Kazakhstan is an active player on the international arena, and in various regional and international organisations. The international (external) partnerships that the country has developed serve its development goals well; nowadays they are concentrated on trade, investments, finance, ICT and regional and international cooperation. The country's needs in development assistance have reduced and changed in nature – towards specialized, high-quality knowledge and experience and strengthening national capacities at the sub-national level. Therefore, many bilateral donors have concluded their programmes of assistance and new joint cooperation programmes have been put in place. Kazakhstan aspires to become a new donor country.

The partnerships within the country vary in scope and dynamics. While the partnerships with private sector entities are gaining speed, the dialogue and partnerships with civil society are developing at a slower pace. Domestic partnerships need to focus in the future on priority development issues: inequality and marginalization, development at sub-national level, and decent and productive employment for youth and women.

The dialogue between the government and the

private sector in the context of long-term development objectives has increasing depth and breadth. The topic of corporate social responsibility of business is gaining attention. Through national development institutes the government finances innovative projects. The country has made good progress in ICT development – particularly in public administration and in education areas. E-governance and the use of ICT in all spheres is a high priority and will continue receiving sustained attention and funding.

The main issues related to youth education and employment revolve around the quality of education and its lack of coordination with the needs of the labour market. Youth in rural areas have greater difficulties in finding decent employment. To make use of the youth capacity in building a democratic society, a new law on youth policy is needed. The prerogative of the republican level organisation «Congress of the Young People of Kazakhstan» that is being set up should be active in protecting of the interests of young people in the labour market and in the education sphere.

In the area of civil society partnerships future efforts need to be focused on strengthening existing mechanisms for dialogue and cooperation and the creation of new ones. A very important direction is the outsourcing of some social services to NGOs.

# MDG + STRATEGY FOR KAZAKHSTAN

Goals and objectives related to improving the quality of life and the standard of living, and ensuring the conditions for physical, spiritual and intellectual development are identified as the most important in all of the programme strategic documents on social and economic development in Kazakhstan. That is why economic stability achieved in recent years has to ensure social security and adequate standards of life, work, education and health and in this way create preconditions for quality development of human potential in Kazakhstan. Development priorities defined in the state programme documents are basically in line with the MDG ideology and they constitute the basis for the formulation of a system of MDG goals and indicators adapted to country specifics.

MDG goals and targets are linked with the increase in the overall income of the population, improvement of the system of education, promotion of equality between men and women, disease control, ensuring environmental sustainability, and the formation of global partnerships for development. To achieve these goals it is important to create mechanisms for the stimulation of transformations implemented at the regional level in the labour market sphere, economic restructuring and diversification, introduction of social innovations and perfection of both public administration, local and social self-governance.

Analysis of MDG adapted to Kazakhstan and viewed as a global instrument of country social-economic monitoring shows that Kazakhstan has already achieved some goals and made considerable progress with regard to other goals, including poverty reduction, access to education and promotion of women's rights. Targets in the health sector and rational use of natural resources require additional efforts both on behalf of the state and civil society.

It is due to economic growth that the poverty level has been reduced considerably; the income deficit of the poor has gone down, which enabled the enhancement of targeted social support, and balance of supply and demand at the labour market. The possibility to implement the strategy of education upgrading, its adaptation to labour market requirements in the country and preparation for life-long learning manifests its direct dependence upon the level of economic development. More than that, the management and financing system reform in the sphere of education make it possible to create conditions necessary to expand the coverage of the population with universal secondary education. Economic growth turned out to be yet another key factor in creating fair conditions for the self-actualization of women and men, and for the improvement of the women's position.

Successful reforms in social-economic development make it possible for Kazakhstan to achieve more ambitious goals of improvement in the quality of life for the people in Kazakhstan. Development priorities defined in the state programme documents are basically in line with MDG ideology, and may constitute the basis for the formulation of a system of MDG goals and indicators adapted to the country specifics (MDG + strategy).

MDGs + for Kazakhstan imply voluntary expansion of international MDGs in the spheres in which Kazakhstan has already achieved goals not only in their original version, but also more advanced goals adapted for the country. Such goals include poverty reduction, access to education and women's right promotion. Having concentrated the efforts of the state and having developed the idea of the functioning public-private partnership system, it is possible to achieve the objectives of human capacity development and the improvement of the quality of life of the country population.

## MDG 1 + AGENDA

The high rate of GDP growth, economic policy based on structural shifts in favour of high-tech non-raw-material sectors of economy, and the promotion of mobility of able-bodied citizens contributed to the reduction of the poor population and unemployed people in the country. In practically all the oblasts of the Republic, a steady trend to population income growth is observed and this trend is accompanied by considerable regional difference in pecuniary gains. The ratio between maximum and minimum volumes of pecuniary gains in the regions is getting worse. Regardless of certain progress in income-based poverty reduction in the Republic, there is a considerable risk for a certain part of the population living on the verge of poverty to become poor given that these people's gains are too low to ensure an adequate standard of life.

As of today, the size of the subsistence minimum in the country does not ensure a good quality of life level given that the determined size of a minimum monthly salary does not cover expenses for the food segment of this subsistence minimum, which according to the estimates of Trade Union Federation make up 20,914 tenge. It is necessary to determine and introduce national salary-based quality of life standards, taking into account the consumer basket, which would allow the satisfaction of natural physiological, material and spiritual needs.

In recent years there was a growth of the GDP per capita, and what is more important, an increase in the Human Development Index, which reflects social aspect of such growth. Among poverty peculiarities there is the fact that almost half of poor people are the so-called «working poor people»; and families with children have the highest risk to become the poorest; the problem of undernourishment (and nutrition quality) is still pertinent for Kazakhstan.

Poverty is closely linked with health status and social well-being. Results of the survey implemented by WHO at the global and European levels confirmed complex links between poverty and diseases: health indicators improve with economic status growth, which creates

preconditions for the improvement of living standards and for increasing the possibility to get health related services. The reverse is true as well: an adequate income level hinders incidence increase among poor people and adequate treatment prevents losing a paying job due to disease. One more aspect of this relationship: an unhealthy living standard determined, let us say, by tobacco-smoking and alcohol abuse, leads not only to a cumulative effect but also increases the risk of incidence and fatalities, which could have been prevented; it also minimizes the capability of low income families to maintain good health due to better quality goods and services. Free access of the poorest population groups to TB and HIV/AIDS treatment will contribute to increase their gains.

The regional nature of social aid aggravates the contradiction between the inequality of the income base of different regions, and the necessity to support the poorest population groups. There is an urgent need for the continuous monitoring and analysis of the social impact of implemented policies, in the development of respective compensatory and mitigation measures within the reform programme. Specific institutional changes in the sphere of social support may include: state support to craft workers and craft associations living in rural areas, and especially for rural women in order to contribute to the diversification of sources of revenues; introduction of pilot regional programmes of employment expansion, especially among the rural population to ensure regional diversification and taking into account differences between the regions in terms of their economic, social and cultural peculiarities. Micro-financing as a part of strategy on poverty reduction is not quite accessible for individual businessmen and especially for rural women. The creation of favourable conditions for micro-financial institutions would allow bringing up the living standard of different population groups with expanded access to financial resources.

To lessen the poverty level within the region it is necessary to bring up the quality of economic growth and enhance targeted social support.

State policy targeted at poverty reduction in Kazakhstan has to be oriented not only at those that are already in extreme poverty, but has to contribute to preventing the risk of poverty. For a certain part of the population that is in risk of becoming absolutely poor, it is reasonable to use threshold income size, which is double the size of the subsistence level. Vulnerability of the population with an average per capita income below the double size of the subsistence

level (the proportion of which is about 40%) is becoming more acute due to the unreliability of employment, low and unstable income and limited access to housing, drinking water and sanitation as well as to social services. Defining an optimum level of minimum salary will make it possible to increase the income of those working as well as the attractiveness of employment, which will result in poverty reduction in the country.

### Proposals regarding MDG + for Kazakhstan include the following targets and indicators:

MDG +	Target	Indicators
	Halve the proportion of people in rural areas with incomes below subsistence minimum	To increase twofold, by 2015, the size of the subsistence minimum
		The proportion of poor people versus the size of the subsistence minimum
		Ratio between maximum and minimum size of pecuniary gains of the population by regions
		Number of children with deviation exceeding standard deviation defined by the World Health Organization with regard to the ratio of height/ weight and age
		Proportion of rural population above 18 years of age with nutritional and dietary energy below minimum level
		Number of regional public health centres that promote healthy life style, disease prevention and timely rehabilitation methods

## MDG 2 + AGENDA

Education system reform is one of the most important instruments to ensure the real competitiveness of the country and move Kazakhstan toward the goal of being listed among the 50 most competitive countries of the world. The State Programme of Education Development in Kazakhstan for 2005-2010 recognizes the provision of good quality education at all levels in line with the principles of continuity and succession underlying the importance of creating a healthy learning environment, the formation of life skills and social-vocational competences of secondary education graduates.

The Government is pretty much active with regard to reforming both the system of primary education and the entire system of education. A major objective of the strategy of education updating is upbringing its efficiency and reduction of its costs while taking into account present day market economy requirements.

The development strategy as of 2010 defines human capital recovery as one of the principal targets of reform. The majority of programmes stipulate reforming the system of management and financing in the sphere of education. Among the major priorities in this sector are: overcoming existing inter- and intraregional differences; and monitoring indicators of universal primary and basic education, including bringing up the monitoring efficiency of the number of children not covered by the system of education as well as children that are in need of special educational services. The organisation of education for children with special educational requirements has to be the focus of attention of the Government, given that there is a need for different medical-social and psychological-pedagogic services and consultations, specialized textbooks, training materials and the gradual implementation of the idea of inclusive education.

### Proposals regarding MDG + for Kazakhstan include the following targets and indicators:

MDG +	Target	Indicators
	Ensure universal secondary education	Enrolment rate in general secondary education of a) population of respective age group, b) availability of schools and places in them
		Survival rate of each level of general secondary education
		Enrolment rate in secondary education for children with special needs
		Gross entry ratio of students enrolled in secondary vocational and higher education
		Number of children covered by pre-school training and education.
		Development of a unified standard of the national education statistics mandatory for all
		Enrolment rate in secondary education for children doing distance learning in rural area

Updating the content of education as well as methods and technologies of teaching is becoming pertinent given the transition to a 12-year secondary education, aimed at improvement of its quality through enhancement of the component dealing with specialization of education as an important condition for training a competitive specialist.

Recognizing the importance of pre-school education for successful education at the subsequent levels, it is necessary to create conditions and incentives in expanding the network of pre-schools and pre-school services. It is necessary to use the advantages of public-business partnership and

to widen free access to pre-schools that ensure programmes of early child development within the system of day-time kindergartens and programmes aimed to improve the quality of training for pre-school sector employees.

The concept of life-long education implies the «process of continuous education since birth and in the course of the entire life» for all citizens of the country.

While recognizing progress of the country in achieving MDG Target 3, more ambitious plans with regard to expansion of the population coverage toward universal secondary education could be recommended.

## MDG 3+ AGENDA

As a result of the global survey implemented in 2005 by the international group of UN experts (MDG Task Force 3) with regard to the development of additional targets and indicators for MDG 3 «Promote gender equality and empower women», 7 strategic priorities have been defined to widen this Goal<sup>111</sup>. An increase in the representation of women on all decision-making levels, the creation of functioning mechanisms and the elimination of violence against women, the introduction of a gender approach in development and the implementation of all budget processes are the most pertinent issues for voluntary MDG 3 expansion in the Republic of Kazakhstan.

Widening the legislative base and overcoming stereotypes of traditional gender roles ascribed to each sex at the family and entire society level are among priority measures. Adoption of a draft law stipulating equal rights and equal possibilities for men and women, as well as a draft law ensuring living conditions in a family free from violence, will contribute to the achievement of the goal set.

It is important to increase women's share of seats in the public administration bodies, specifically at the level of political positions, which will broaden access of the society on the whole to the instruments of gender sensitivity and will help to eliminate discriminatory practice in the sphere of labour and employment.

Development of mechanisms aimed at combating violence against women is a separate objective.

Improvement of full coverage and quality of statistical reports with regular data disaggregation by sex will help to improve the quality of monitoring over gender policy implementation and also to come up with new initiatives.

It is necessary to ensure the implementation of a full-fledged gender analysis when developing and implementing priority budget programmes in terms of improvement of the position of women and gender equality achievement.

<sup>111</sup> To ensure that Goal 3 is met by 2015, the MDG Task Force 3 has identified seven strategic priorities:

1. Strengthen opportunities for postprimary education for girls while simultaneously meeting commitments to universal primary education.
2. Guarantee sexual and reproductive health and rights.
3. Invest in infrastructure to reduce women's and girls' time burdens.
4. Guarantee women's and girls' property and inheritance rights.
5. Eliminate gender inequality in employment by decreasing women's reliance on informal employment, closing gender gaps in earnings, and reducing occupational segregation.
6. Increase women's share of seats in national parliaments and local governmental bodies.
7. Combat violence against girls and women.

**Proposals regarding MDG + for Kazakhstan include the following targets and indicators:**

MDG +	Target	Indicators
	To ensure adoption and implementation of measures aimed to increase representation of women in legislative and executive bodies	<p>Adoption of the Law on equal rights and opportunities.</p> <p>Adoption of by-laws to implement the Law on Equal Rights and Equal Opportunities and bringing it in line with other laws</p> <p>The share of women in membership of local and republican governmental bodies should be not less than 25% by 2015</p> <p>The share of women holding political positions in local and republican executive bodies should be not less than 20% by 2015</p>
	Ensure legislative and executive measures to prevent and eliminate violence against women	<p>Adoption of the law on combating violence against women</p> <p>Adoption of by-laws to implement the Law on Elimination and Prevention of Violence Against Women</p> <p>Increase by 30 % (compared to 2005) of the targeted out-of-budget financing of measures on prevention and elimination of violence against women</p> <p>Increase by 30 % (compared to 2005) of the targeted financing out of local budgets for the activity of crisis centres</p> <p>Availability of national statistic data on offences in family and households, on crime against women</p>
	Ensure sustainable gender mainstreaming of national planning and budgeting, especially aiming at minimizing gender wage gaps	<p>Legislative back-up of gender-based expert examination with regard to budgets of priority programmes</p> <p>Ratio of women's earnings should be not less than 80% of wages of men by 2015 (2005 – 61.7%)</p>

## CONCLUSIONS

The proposed MDG+ targets on poverty reduction, on ensuring universal secondary education and on the promotion of women's rights complement directions and measures stipulated by strategic and programme development documents of Kazakhstan, and will contribute to the increase of the country's competitiveness. Mention should be made that achievement of development goals highlighted as MDG+ is given close attention on the part of the President of the RK, the government and central executive bodies. The majority of decisions especially with regard to human development are made both at the central and regional level. Success in achieving identified MDG+ to a great extent depends on the country's macroeconomic development, on real sector development, on ensuring public-private consensus regarding long-term goals and increasing Kazakhstan competitiveness.

A major factor able to ensure the growth of the population well-being is economic growth. It is very important to achieve quality of economic growth related to the development of competitive productions, decisions on effective temporary support measures, and retraining or mobility of employees.

It is necessary to boost the implementation of social programmes and services facilitating population economic activity. A considerable proportion of able-bodied citizens among poor people proves the necessity of harmonization

of the activity of social protection bodies and employment agencies not only in the field of social support but also in labour market development. To achieve full-fledged development and use of human potential it is important to implement a wide range of social and investment mobility promotion programmes through allocation of educational loans to young people, and the implementation and development of the so called continuous education.

To involve the general population into the MDG+ implementation it is necessary to go beyond public discussions and hearings and begin cooperation on a regular basis, which will make it possible for the non-governmental organisations and initiative groups to make considerable contributions to the improvement of social development management. It is important to develop public and political institutes that promote sustainable growth, corruption reduction, updating systems of education and health care, successful implementation of administrative reforms, and promotion of the increase of domestic product competitiveness.

Development breakthrough is only possible by applying a comprehensive approach in the presence of audacity and zeal of governmental bodies, through consistency and system-based decisions made by them, and the active involvement of business and the population in management, orientation at MDGs and other ambitious strategic goals of the country's development.



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## MDG 1. ERADICATE EXTREME POVERTY AND HUNGER

Share of population with income below the subsistence minimum by oblasts of the Republic of Kazakhstan in 2001-2006\*, percentage, %

	2001			2002			2003		
	proportion of people with income (for consumption), below the subsistence minimum	including		proportion of people with income (for consumption), below the subsistence minimum	including		proportion of people with income (for consumption), below the subsistence minimum	including	
		in urban areas	in rural areas		in urban areas	in rural areas		in urban areas	in rural areas
The Republic of Kazakhstan	46.7	36	59.4	44.5	33	58.4	37.5	24.7	53.2
Akmola oblast	42.9	36.1	47.9	40.5	34.4	45.1	35.1	28.6	40.1
Aktobe oblast	41.4	29.9	57.8	36.9	23.2	55.3	28.5	15.8	45.8
Almaty oblast	61.1	51.7	65.1	57.9	47.8	62.3	42.7	25.1	50.0
Atyrau oblast	56.4	50.2	66.5	57.0	47.4	72.1	48.0	39.0	61.9
East Kazakhstan oblast	36.8	29.0	47.4	36.1	26.3	49.1	31.9	21.2	47.3
Zhambyl oblast	70.7	61.1	77.3	59.7	51.8	65.3	54.0	44.7	60.9
West Kazakhstan oblast	47.5	40.4	52.0	51.4	38.3	60.1	34.2	25.2	40.4
Karaganda oblast	39.4	35.2	55.9	35.4	30.0	57.8	29.4	21.4	61.8
Kostanay oblast	42.4	27.6	58.4	43.9	31.1	59.0	42.3	29.6	56.5
Kyzylorda oblast	63.5	55.5	76.4	62.5	51.3	79.4	52.5	40.5	72.2
Mangistau oblast	60.0	51.6	95.5	56.5	47.9	91.3	42.5	33.5	86.6
Pavlodar oblast	33.3	27.2	41.6	43.3	30.9	61.1	24.0	12.6	42.0
North Kazakhstan oblast	25.1	18.6	29.2	40.0	28.5	47.3	30.3	17.9	38.0
South Kazakhstan oblast	60.9	50.2	66.6	52.9	47.3	55.9	54.6	40.1	62.5
Astana city	7.7	7.7	-	6.3	6.3	-	4.5	4.5	-
Almaty city	19.4	19.4	-	13.1	13.1	-	12.1	12.1	-

Share of population with income below the subsistence minimum by oblasts of the Republic of Kazakhstan in 2001-2006\*, percentage, % (continued)

	2004			2005			2006		
	proportion of people with income (for consumption), below the subsistence minimum	including		proportion of people with income (for consumption), below the subsistence minimum	including		proportion of people with income (for consumption), below the subsistence minimum	including	
		in urban areas	in rural areas		in urban areas	in rural areas		in urban areas	in rural areas
The Republic of Kazakhstan	33.9	23.4	47.1	31.6	20.2	45.6	18.2	13.6	24.4
Akmola oblast	36.9	30.8	41.5	33.9	29	37.7	25.4	25.7	25.1
Aktobe oblast	28.0	18.1	41.3	28.7	16.9	44.4	17.2	5.7	32.6
Almaty oblast	28.0	20.9	30.8	30.3	24.8	32.6	21.3	20.0	21.9
Atyrau oblast	52.0	41.4	67.8	51.6	40.2	69.2	23.8	11.6	42.8
East Kazakhstan oblast	31.6	20.7	46.6	26.6	15.5	40.0	12.5	9.7	16.4
Zhambyl oblast	32.2	29.5	34.3	41.2	34.5	46.6	23.6	21.5	25.2
West Kazakhstan oblast	33.2	17.5	44.2	33.9	17.2	45.1	13.2	6.2	18.0
Karaganda oblast	26.7	19.1	58.2	21.1	15.7	44.6	20.2	15.5	41.0
Kostanay oblast	40.0	25.4	56.9	34.5	19.2	51.9	14.0	4.4	24.9
Kyzylorda oblast	56.6	50.2	68.0	47.7	38.2	63.4	37.5	37.2	38.2
Mangistau oblast	40.4	29.9	89.0	29.8	21.0	67.7	26.5	17.2	63.2
Pavlodar oblast	23.4	12.1	42.9	20.3	9.6	37.2	12.0	6.5	21.1
North Kazakhstan oblast	32.3	21.9	38.6	28.5	18.3	35.1	22.3	10.0	30.1
South Kazakhstan oblast	51.4	37.2	59.4	46.8	29.2	56.8	14.1	11.4	16.2
Astana city	3.5	3.5	-	3.6	3.6	-	5.5	5.5	-
Almaty city	12.6	12.6	-	10.6	10.6	-	12.1	12.1	-

\*Source: the Agency for Statistics of the Republic of Kazakhstan

Share of population with income below the consumer basket by oblasts \*

	2001			2002			2003		
	proportion of population with income below the consumer basket	including		proportion of population with income below the consumer basket	including		proportion of population with income below the consumer basket	including	
		in urban areas	in rural areas		in urban areas	in rural areas		in urban areas	in rural areas
The Republic of Kazakhstan	16.1	10.7	22.6	13.8	8.6	20.1	9.1	4.9	14.2
Akmola oblast	11.8	11.1	12.4	10.0	10.6	9.5	8.3	6.5	9.8
Aktobe oblast	16.5	7.8	28.9	14.5	4.2	28.3	8.8	2.7	17.0
Almaty oblast	25.6	20.4	27.7	20.5	13.9	23.4	7.9	4.6	9.2
Atyrau oblast	25.8	22.7	31.0	23.9	18.2	32.9	15.5	12.9	19.6
East Kazakhstan oblast	12.9	8.2	19.4	13.1	9.0	18.5	9.3	6.7	13.0
Zhambyl oblast	26.1	24.4	27.4	18.0	14.7	20.4	17.1	6.1	25.1
West Kazakhstan oblast	13.8	10.5	15.8	15.3	6.5	21.1	6.1	1.9	9.0
Karaganda oblast	11.3	10.1	16.0	9.2	8.1	13.7	6.3	4.0	15.4
Kostanay oblast	17.8	8.0	28.5	20.6	11.6	31.2	17.8	6.3	30.8
Kyzylorda oblast	15.6	11.6	22.0	19.4	12.7	29.6	13.3	9.6	19.5
Mangistau oblast	32.2	17.8	93.5	28.4	18.6	67.7	6.3	5.2	11.6
Pavlodar oblast	8.7	6.6	11.5	12.1	5.3	21.9	5.8	3.0	10.3
North Kazakhstan oblast	5.4	2.8	7.1	11.0	2.4	16.5	7.4	1.7	10.8
South Kazakhstan oblast	20.6	15.1	23.6	11.0	8.9	12.2	9.6	8.3	10.3
Astana city	1.2	1.2	-	1.3	1.3	-	0.4	0.4	-
Almaty city	2.8	2.8	-	1.3	1.3	-	1.0	1.0	-

Share of population with income below the consumer basket by oblasts \* (continued)

	2004			2005			2006		
	proportion of population with income below the consumer basket	including		proportion of population with income below the consumer basket	including		proportion of population with income below the consumer basket	including	
		in urban areas	in rural areas		in urban areas	in rural areas		in urban areas	in rural areas
The Republic of Kazakhstan	6.3	3.9	9.4	5.2	2.4	8.5	2.7	1.8	3.8
Akmola oblast	9.5	8.0	10.7	7.7	5.5	9.4	5.6	5.8	5.4
Aktobe oblast	6.1	1.4	12.4	7.0	1.7	14.0	2.0	-	4.6
Almaty oblast	2.8	4.9	2.0	3.8	4.1	3.7	3.4	4.3	3.0
Atyrau oblast	17.1	13.4	22.5	12.9	6.9	22.2	3.7	0.8	8.4
East Kazakhstan oblast	7.0	3.6	11.8	5.7	1.9	10.4	1.6	1.0	2.5
Zhambyl oblast	4.3	2.9	5.4	5.5	4.8	6.1	3.0	1.4	4.3
West Kazakhstan oblast	4.8	0.5	7.8	6.6	0.6	10.6	2.6	2.0	3.0
Karaganda oblast	4.7	2.2	15.5	3.6	1.7	11.6	4.0	3.2	8.0
Kostanay oblast	13.1	2.7	25.1	9.3	2.4	17.2	2.7	0.1	5.6
Kyzylorda oblast	15.6	13.5	19.4	5.8	4.4	8.1	4.1	5.7	1.5
Mangistau oblast	6.6	5.7	10.5	2.7	-	14.1	0.8	-	4.0
Pavlodar oblast	5.5	3.3	9.1	4.0	1.4	8.3	0.6	0.1	1.3
North Kazakhstan oblast	6.8	2.2	9.5	5.2	2.4	7.1	5.6	1.8	7.9
South Kazakhstan oblast	5.1	5.3	5.1	4.6	3.9	5.0	1.6	1.6	1.5
Astana city	1.1	1.1	-	0.9	0.9	-	0.4	0.4	-
Almaty city	0.7	0.7	-	0.2	0.2	-	0.8	0.8	-

\* Source: the Agency for Statistics of the Republic of Kazakhstan

## MDG 2. ACHIEVE UNIVERSAL PRIMARY EDUCATION

Number of daytime educational institutions, students and teachers\*

Urban area	2002/03			2003/04			2004/05			2005/06			2006/07		
	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers
The Republic of Kazakhstan	8,334	3,115	279,326	8,254	3,044.7	285,854	8,221	2,935.9	286,934	8,157	2,824.6	286,345	8,055	2,715.9	282,924
Akmola oblast	733	151.7	15,226	716	146.5	15,177	716	140.1	15,147	710	133.1	15,282	697	126.1	14,952
Aktobe oblast	505	153.9	14,854	494	150.5	15,143	491	144.3	14,940	488	138.6	14,789	483	132.6	14,486
Almaty oblast	755	347.4	30,913	754	342.1	31,838	754	332.4	32,483	755	318.2	32,296	755	305.7	31,736
Atyrau oblast	199	114.7	9,838	198	113.2	9,968	199	110.2	9,876	200	105.8	9,947	202	101.6	9,775
East Kazakhstan oblast	847	271.9	24,020	843	259.2	23,978	840	242.9	23,792	834	228	23,359	821	214.6	22,735
Zhambyl oblast	470	221	20,272	472	217.7	20,836	472	211.9	21,270	476	204.5	21,509	472	196.8	21,474
West Kazakhstan oblast	497	126.8	13,560	486	122.5	13,842	482	117.5	13,945	475	112.8	13,859	466	106	13,535
Karaganda oblast	635	249.3	21,209	628	239.4	21,418	624	227	21,133	615	215.7	20,890	606	204.1	20,183
Kostanay oblast	727	160.7	14,483	713	152.7	14,572	697	144.2	14,436	681	135.5	14,276	654	126.6	13,803
Kyzylorda oblast	292	153.4	14,817	289	151.6	15,324	291	148.2	15,560	291	144	15,948	290	139.1	16,205
Mangistau oblast	114	87	6,179	113	88.5	6,346	117	88.1	6,365	121	87.3	6,588	123	86.9	6,661
Pavlodar oblast	486	141.2	13,344	477	133.1	13,270	474	124.3	13,011	466	115.9	12,753	456	107.9	12,414
North Kazakhstan oblast	754	127.1	13,843	740	120.6	14,126	728	112.6	13,946	707	105.1	13,530	684	98.7	12,961
South Kazakhstan oblast	1,017	549.2	48,469	1,022	549.8	50,775	1,025	542.2	52,026	1,026	534.4	52,604	1,031	525.9	53,083
Astana city	62	60	3,948	66	60.5	4,052	67	61	4,050	69	62.3	4,097	74	64.9	4,330
Almaty city	237	192.2	14,689	243	196.8	15,189	244	189	14,954	243	183.4	14,618	241	178.4	14,591

\* Source: the Agency for Statistics of the Republic of Kazakhstan

Number of daily educational institutions, number of students and number of teachers\*

Rural area	2002/03			2003/04			2004/05			2005/06			2006/07		
	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers	number of daytime educational institutions	number of students, TDS people	number of teachers
The Republic of Kazakhstan	6,151	1,461.2	158,002	6,113	1,427.2	160,589	6,080	1,383.7	163,172	6,016	1,319	162,664	5,949	1,267.9	161,699
Akmola oblast	607	84.7	10,163	596	81.8	10,074	590	78.1	10,177	583	73.3	10,264	572	69.5	10,098
Aktobe oblast	404	70.8	8,736	395	68.8	8,889	390	64.9	8,733	386	62	8,685	382	59.1	8,460
Almaty oblast	610	238.2	22,963	611	234.2	23,553	611	227.3	24,126	617	217.2	24,029	618	208.6	23,707
Atyrau oblast	116	47.2	4,993	116	47	5,055	117	46.9	5,181	119	46.5	5,297	119	44.5	5,194
East Kazakhstan oblast	611	121.5	13,660	611	115.8	13,464	609	108.4	13,339	604	101.7	13,121	595	94.6	12,712
Zhambyl oblast	363	132.9	13,261	362	125.7	13,132	365	124.6	13,640	370	120.9	14,062	371	116.4	14,246
West Kazakhstan oblast	438	76.4	9,860	425	73.7	9,902	419	70.6	10,013	412	67.9	10,023	404	63	9,716
Karaganda oblast	344	50.1	6,573	339	48	6,523	336	44.8	6,474	330	41.9	6,324	323	38.7	6,127
Kostanay oblast	580	78.3	8,593	585	75.3	8,796	573	70.6	8,865	557	65.3	8,725	546	63.8	8,864
Kyzylorda oblast	178	55.3	6,364	182	55	6,682	182	54.2	6,803	184	52.9	6,981	185	51.2	7,194
Mangistau oblast	45	19.6	1,917	48	21.6	2,094	49	22.5	2,196	52	22.5	2,311	54	22.8	2,389
Pavlodar oblast	359	51.8	6,759	354	49	6,786	351	45.3	6,780	344	41.8	6,713	340	39.1	6,747
North Kazakhstan oblast	677	82.2	10,406	665	78.5	10,593	663	77.1	10,877	643	71.8	10,584	622	67.2	10,105
South Kazakhstan oblast	819	352.2	33,754	824	352.8	35,046	825	348.4	35,968	815	333.3	35,545	818	329.4	36,140
Astana city															
Almaty city															

\* Source: the Agency for Statistics of the Republic of Kazakhstan

### MDG 3. PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

Average monthly nominal wages of men and women\*

	2001		2002		2003		2004		2005		2006		2007 3 quarter	
	men	women	men	women	men	women	men	women	men	women	men	women	men	women
The Republic of Kazakhstan	21,511	12,635	24,847	15,340	28,476	17,304	34,648	21,445	41,840	25,564	49,737	30,984	64,509	41,089
Akmola oblast	11,558	8,509	13,536	10,939	10,937	12,722	21,083	16,069	25,903	19,294	32,243	22,885	43,272	30,471
Aktobe oblast	23,272	12,111	26,492	14,774	29,916	16,674	36,627	20,917	43,152	24,974	50,573	29,457	60,661	37,771
Almaty oblast	14,329	9,357	16,296	12,429	18,615	13,469	23,798	16,902	29,533	19,944	36,011	24,079	47,646	33,144
Atyrau oblast	46,213	21,198	54,033	25,171	63,605	28,577	69,076	33,250	84,541	38,697	95,888	45,471	125,008	56,873
East Kazakhstan oblast	20,658	12,679	22,506	14,790	23,673	16,159	27,776	19,506	32,253	22,671	38,549	26,987	49,470	35,847
Zhambyl oblast	12,656	8,861	15,777	11,073	17,382	12,296	22,450	15,891	26,839	18,596	32,123	21,978	40,143	29,063
West Kazakhstan oblast	27,051	12,421	36,923	15,566	41,814	16,862	43,143	20,208	48,483	23,630	52,652	27,454	68,494	36,740
Karaganda oblast	19,864	11,753	21,673	13,632	24,128	15,067	30,201	18,507	34,419	21,545	42,401	25,833	55,183	34,012
Kostanay oblast	15,194	9,721	16,397	11,473	19,573	13,482	24,019	16,890	28,376	19,976	34,085	23,877	43,468	31,840
Kyzylorda oblast	17,593	10,192	20,868	12,887	24,688	14,616	33,138	18,802	38,724	22,117	44,208	26,764	56,127	37,699
Mangistau oblast	46,629	20,755	49,300	23,284	56,850	26,098	67,823	32,584	80,633	37,650	91,045	42,955	109,670	54,289
Pavlodar oblast	22,369	12,387	24,378	14,564	26,701	16,404	33,021	20,199	38,170	23,404	45,036	28,114	55,047	36,044
North Kazakhstan oblast	13,454	10,024	15,170	12,128	17,067	13,410	21,334	17,006	25,852	20,196	30,408	23,929	38,725	31,212
South Kazakhstan oblast	14,022	9,163	15,799	11,548	17,984	12,802	23,083	15,939	27,287	18,685	32,967	22,586	43,205	31,146
Astana city	26,593	18,293	32,426	22,553	39,073	26,357	49,116	33,470	59,236	40,851	71,689	52,128	91,831	67,258
Almaty city	27,789	19,042	33,866	23,086	38,667	26,523	46,563	32,330	57,952	39,816	68,105	49,329	89,165	65,685

\* Source: the Agency for Statistics of the Republic of Kazakhstan



## MDG 4. REDUCE CHILD MORTALITY

### Child mortality\*

	Number of infants died at the age of 1, per person					per 1 000 live births				
	2003	2004	2005	2006	January-No- vember, 2007	2003	2004	2005	2006	January-No- vember, 2007
All population	3,824	3,901	4,213	4,154	4,255	15.7	14.5	15.2	13.9	14.5
Akmola oblast	121	148	140	134	132	11.8	13.6	13.1	11.8	12.1
Aktobe oblast	210	182	191	195	174	19.8	15.4	14.8	14.4	13.9
Almaty oblast	321	326	330	304	289	12.5	11.8	11.9	10.1	9.4
Atyrau oblast	154	135	122	144	146	16.4	13.8	11.5	12.4	13.5
West Kazakhstan oblast	138	140	145	127	117	15.8	14.4	15.0	12.7	12.7
Zhambyl oblast	284	321	341	316	338	15.9	15.9	15.9	13.4	14.9
Karaganda oblast	264	227	216	229	222	14.7	11.9	11.0	11.0	11.1
Kostanay oblast	184	167	183	131	144	16.2	14.5	16.6	11.6	13.8
Kyzylorda oblast	278	267	332	342	299	22.4	19.5	23.9	22.7	20.1
Mangistau oblast	139	164	171	189	200	17.4	17.9	17.4	17.1	17.9
South Kazakhstan oblast	772	828	921	1,021	1,191	15.3	14.6	16.0	16.4	18.9
Pavlodar oblast	154	165	135	159	112	16.1	15.9	13.0	14.5	10.2
North Kazakhstan oblast	115	122	128	90	112	14.0	14.8	15.1	10.8	14.3
East Kazakhstan oblast	317	315	372	335	288	17.5	16.4	19.0	16.0	14.9
Astana city	82	96	120	109	127	12.9	12.1	13.5	11.0	11.3
Almaty city	291	298	366	329	364	15.1	12.9	14.3	11.8	12.9
Urban population	2,349	2,418	2,711	2,730	2,541	17.2	15.7	16.6	15.7	16.0
Akmola oblast	59	80	68	57	71	11.7	14.1	11.8	9.1	12.0
Aktobe oblast	127	117	127	121	114	18.9	15.3	15.7	14.4	15.0
Almaty oblast	110	115	116	119	64	13.4	13.0	12.9	12.0	8.2
Atyrau oblast	101	97	81	90	73	16.9	15.1	11.3	12.6	13.5
West Kazakhstan oblast	53	66	73	69	53	13.8	15.3	16.4	14.3	13.2

	Number of infants died at the age of 1, per person					per 1 000 live births				
	2003	2004	2005	2006	January-No- vember, 2007	2003	2004	2005	2006	January-No- vember, 2007
Zhambyl oblast	167	191	205	197	180	23.0	22.9	22.5	19.9	19.8
Karaganda oblast	223	199	194	191	159	13.8	11.4	10.7	10.7	10.4
Kostanay oblast	120	93	108	76	71	20.4	15.6	18.4	12.5	14.6
Kyzylorda oblast	171	172	221	220	109	22.2	20.2	25.0	22.8	17.8
Mangistau oblast	105	121	114	121	114	17.4	17.6	16.5	16.0	17.2
South Kazakhstan oblast	390	435	561	670	734	21.5	20.3	24.2	26.5	30.3
Pavlodar oblast	103	95	97	120	84	16.6	13.6	13.6	15.7	10.9
North Kazakhstan oblast	56	48	54	38	49	18.7	17.4	17.3	12.2	16.2
East Kazakhstan oblast	191	195	206	203	170	18.0	17.2	17.5	15.8	15.1
Astana city	82	96	120	109	127	12.9	12.1	13.5	11.0	11.3
Almaty city	291	298	366	329	364	15.1	12.9	14.3	11.8	12.9
Rural population	1,475	1,483	1,502	1,424	1,714	13.6	12.9	13.0	11.5	12.7
Akmola oblast	62	68	72	77	61	11.9	13.0	14.5	15.3	12.1
Aktobe oblast	83	65	64	74	60	20.6	15.5	13.5	14.3	12.2
Almaty oblast	211	211	214	185	225	12.1	11.3	11.4	9.2	9.8
Atyrau oblast	53	38	41	54	73	15.3	11.4	11.8	12.3	13.5
West Kazakhstan oblast	85	74	72	58	59	17.1	13.7	13.9	11.2	12.2
Zhambyl oblast	117	130	136	119	158	11.1	11.0	11.1	8.8	11.5
Karaganda oblast	41	28	22	38	63	21.6	17.1	14	15.9	13.6
Kostanay oblast	64	74	75	55	73	11.5	13.3	14.4	10.6	12.9
Kyzylorda oblast	107	95	111	122	190	22.6	18.4	21.9	22.5	21.7
Mangistau oblast	34	43	57	68	86	17.1	18.8	19.5	19.3	18.8
South Kazakhstan oblast	382	393	360	351	457	11.8	11.2	10.4	9.6	11.9
Pavlodar oblast	51	70	38	39	28	15.3	20.5	11.6	11.8	8.7
North Kazakhstan oblast	59	74	74	52	63	11.2	13.6	13.7	10.0	13.2
East Kazakhstan oblast	126	120	166	132	118	16.8	15.2	21.2	16.2	14.7

\* Source: the Agency for Statistics of the Republic of Kazakhstan

## MDG 5. IMPROVE MATERNAL HEALTH

### Maternal mortality\*

	Number of deaths of pregnant women, women in childbirth and recently confined, persons				Per 1 000 live births			
	2003	2004	2005	2006	2003	2004	2005	2006
The Republic of Kazakhstan	104	100	114	138	42.1	36.9	40.5	45.6
Akmola oblast	4	1	2	4	38.2	8.9	18.6	35.3
Aktobe oblast	4	6	2	6	36.9	50.1	15.3	43.6
Almaty oblast	9	10	11	9	36.6	36.5	38.7	29.4
Atyrau oblast	8	5	10	10	86.0	50.3	93.4	84.9
East Kazakhstan oblast	4	3	5	6	44.6	30.9	51.8	59.7
Zhambyl oblast	7	3	11	15	39.8	15.1	52.3	65.2
West Kazakhstan oblast	4	9	4	8	22.1	46.9	20.8	38.8
Karaganda oblast	4	4	4	3	35.6	35.4	36.2	25.9
Kostanay oblast	7	8	11	16	57.0	58.7	79.1	107.6
Kyzylorda oblast	9	6	6	2	112.2	61.9	59.7	16.9
Mangistau oblast	17	21	21	32	33.6	37.2	36.1	52.0
Pavlodar oblast	4	3	2	2	41.3	28.9	19.2	18.2
North Kazakhstan oblast	1	1	5	4	13.2	13.5	61.2	49.8
South Kazakhstan oblast	9	9	8	5	49.7	47.1	39.8	23.8
Astana city	6	5	4	4	90.8	63.2	43.6	37.2
Almaty city	7	6	8	12	28.0	25.0	31.3	34.6

\*Source: The Ministry of Healthcare of the Republic of Kazakhstan

## MDG 6. COMBAT HIV/AIDS AND TUBERCULOSIS

Cumulative data on registered cases of HIV by oblasts as of January 1, 2007

Oblast	total number		prevalence over 100 000 persons	
	total	including children under 14 years old	total	including children under 14 years old
Akmola oblast	129	1	16.9	0.5
Aktobe oblast	130	1	18.9	0.5
Almaty oblast	309	2	19.5	0.4
Atyrau oblast	40	0	8.8	0.0
East Kazakhstan oblast	365	1	24.3	0.3
Zhambyl oblast	180	1	18.2	0.3
West Kazakhstan oblast	213	0	34.6	0.0
Karaganda oblast	1,796	28	129.1	7.9
Kostanay oblast	460	3	47.2	1.2
Kyzylorda oblast	26	0	4.3	0.0
Mangistau oblast	44	0	12.8	0.0
Pavlodar oblast	1,083	5	138.3	2.5
North Kazakhstan oblast	126	1	17.0	0.5
South Kazakhstan oblast	919	85	44.0	11.6
Astana city	1,483	6	128.7	2.3
Almaty city	99	0	22.8	0.0
<b>TOTAL</b>	<b>7,402</b>	<b>134</b>	<b>49</b>	<b>3.1</b>

\*Source: Republican AIDS Centre

## TB notification (new & relapse) and deaths by oblasts in 2006

Oblast	Population, 2006 (thousands)	TB cases, 2006 (new & relapse)		TB deaths, 2006	
		N	Rate	N	Rate
Total, nationwide	15,308.10	23,031	150.4	3,107	20.3
Akmola oblast	747.7	1,370	183.2	112	15.0
Aktobe oblast	691.1	1,345	194.6	166	24.0
Almaty oblast	1,612.20	1,934	120.0	126	7.8
Atyrau oblast	476.5	1,114	233.8	104	21.8
East Kazakhstan oblast	1,427.80	2,375	166.3	356	24.9
Zhambyl oblast	1,005.10	1,369	136.2	224	22.3
West Kazakhstan oblast	610.9	1,231	201.5	128	21.0
Karaganda oblast	1,336.90	2,150	160.8	412	30.8
Kyzylorda oblast	621.7	1,416	227.8	134	21.6
Kostanay oblast	901.8	1,522	168.8	204	22.6
Mangistau oblast	382.5	702	183.5	105	27.5
Pavlodar oblast	743.9	1,505	202.3	236	31.7
North Kazakhstan oblast	662.0	1,323	199.8	276	41.7
South Kazakhstan oblast	2,258.00	2,111	93.5	219	9.7
Almaty city	1,267.60	883	69.7	157	12.4
Astana city	562.4	681	121.1	148	26.3

\*Source: MoH National TB Centre, Almaty, 2007 (Mortality data from State Statistical Committee: Goskomstat)

## MDG 7. ENSURING ENVIRONMENTAL SUSTAINABILITY

Access of urban population of the Republic of Kazakhstan to the water-supply system as of 01.01.2007\*

#	Oblast	Access of urban population to piped water										
		Popula- tion, (per.)	Central- ized water- supply, (per.)	% from total popu- lation of the oblast	Proportion of peo- ple with scheduled access to piped wa- ter, (per.)	% from popu- lation with scheduled access to piped wa- ter (per.)	holes (per.)	% from total popu- lation of the oblast	im- ported (per.)	% from total popu- lation of the oblast	oth- ers (per.)	% from total popu- lation of the oblast
1	Akmola oblast	324,098	269,655	83.2	63,026	23.4	48,118	14.8	6,325	2	-	-
2	Aktobe oblast	359,875	359,299	99.8	11,167	3.1	-	-	-	-	576	0.2
3	Almaty oblast	356,415	301,061	84.5	-	-	55,354	15.5	-	-	-	-
4	Atyrau oblast	214,439	191,529	89.3	27,918	14.6	1,684	0.8	21,226	9.9	-	-
5	East Kazakhstan oblast	761,036	728,911	95.8	-	-	32,125	4.2	-	-	-	-
6	Zhambyl oblast	413,667	410,046	99.1	26,034	6.3	1,089	0.3	2,532	0.6	-	-
7	West Kazakhstan oblast	259,403	257,851	99.4	3,543	1.4	1,552	0.6	-	-	-	-
8	Karaganda oblast	1,006,842	995,028	98.8	42,626	4.3	10,315	1	1,499	0.2	-	-
9	Kostanay oblast	442,208	431,713	97.7	18,862	4.4	7,684	1.7	2,811	0.6	-	-
10	Kyzylorda oblast	211,183	202,107	95.7	31,338	15.5	3,585	1.7	5,491	2.6	-	-
11	Mangistau oblast	257,128	235,299	91.5	56,020	23.8	-	-	21,829	8.5	-	-
12	Pavlodar oblast	478,693	466,180	97.4	701	0.2	11,049	2.3	1,464	0.3	-	-
13	North Kazakhstan oblast	227,440	221,489	97.4	43,311	19.6	5,951	2.6	-	-	-	-
14	South Kazakhstan oblast	815,923	682,247	83.6	64,716	9.5	110,988	13.6	22,688	2.8	-	-
	Almaty city	1,209,485	1,204,633	99.6	-	-	4,852	0.4	-	-	-	-
	Astana city	529,335	528,635	99.9	-	-	-	-	700	0.1	-	-
	Total:	7,867,170	7,485,683	95.15	389,262	5.2	294,346	3.74	86,565	1.1	576	0.01

\* Source: the Agency for Statistics of the Republic of Kazakhstan

Water-supply situation in rural areas of the Republic of Kazakhstan as of 01. 01. 2007\*

#	Oblast	Number of villages	Population, (per.)	System of drinking water-supply												Quality of drinking water			
				Centralized water-supply system				Decentralized water-supply system				Imported water				% of population with access to drinking water		corresponding	Not corresponding
				Number of villages	Population, (per.)	Population, (per.)	Population, (per.)	Number of villages	Population, (per.)	% of population with access to drinking water	Number of villages	Population, (per.)	Number of villages	Population, (per.)	Number of villages	Population, (per.)	% of population with access to drinking water		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
1	Akmola oblast	671	416,494	308	266,542	64	322	140,801	33.8	41	9,151	2.2	619	52					
2	Aktobe oblast	424	323,539	62	112,644	34.8	350	205,804	63.6	12	5,091	1.6	417	5					
3	Almaty oblast	774	1,267,345	419	960,168	75.8	345	306,069	24.1	10	1,108	0.1	722	52					
4	Atyrau oblast	187	282,011	39	144,203	51.1	58	34,983	12.4	90	102,825	36.5	127	60					
5	East Kazakhstan oblast	845	669,493	212	321,681	48	627	346,749	51.8	6	1,063	0.2	841	4					
6	Zhambyl oblast	379	587,771	135	337,134	57.4	236	243,026	41.3	8	7,611	1.3	362	17					
7	West Kazakhstan oblast	477	368,146	109	203,258	55.2	356	158,394	43	12	6,494	1.8	477	-					
8	Karaganda oblast	496	315,532	152	205,626	65.2	335	108,620	34.4	9	1,286	0.4	424	72					
9	Kostanay oblast	682	452,850	136	176,935	39	477	242,132	53.5	69	33,783	7.5	647	35					
10	Kyzylorda oblast	272	419,298	151	351,890	83.9	117	67,105	16	4	303	0.1	257	15					
11	Mangistau oblast	54	157,424	19	71,910	45.7	21	35,130	22.3	14	50,384	32	54	-					
12	Pavlodar oblast	406	285,474	58	93,815	32.9	337	183,318	64.2	11	8,341	2.9	317	89					
13	North Kazakhstan oblast	713	411,303	194	161,745	39.3	498	244,196	59.4	21	5,362	1.3	595	118					
14	South Kazakhstan oblast	876	1,440,059	408	826,707	57.4	403	508,171	35.3	65	105,181	7.3	837	39					
	Total:	7,256	7,396,739	2,402	4,234,258	57.2	4482	2,824,498	38.2	372	337,983	4.6	6,698	558					

\* Source: the Agency for Statistics of the Republic of Kazakhstan

# GLOSSARY

## MDG 1. Eradicate extreme poverty and hunger

**“Hidden hunger”** – is the prevalence of micronutrient deficiency among the population.

**Horizontal professional segregation** – characterizes uneven distribution of men and women by economy sectors and by professions.

**Funds’ coefficient** – the ratio of cash incomes (10%) of the most well-to-do and the poorest people.

**Gini coefficient (the ratio of income concentration)** – allows for the quantitative assessment of the degree of income inequality. It measures the degree of deviation of actual income distribution by quantitatively equal groups from a line of even distribution. It ranges from 0 (absolute income equality among all groups of the population) to 1 (absolute inequality when all income is received by one person), or from 0% to 100%.

**Moderate or critically low weight** – weight to age ratio characterized by more than two standard deviations less than median value of this indicator in the reference group.

**Moderate or critical stunting** – height to age ratio characterized by more than two standard deviations less than median value of this indicator in the reference group.

**Moderate or extreme degree of low weight (wasting)** – weight to height ratio characterized by more than two standard deviations less than median value of this indicator in the reference group, normally wasting is the result of recently developed micronutrient deficiency.

**Poverty depth and acuteness indices** – these indices give an idea as to the degree of poverty of a man as well as about the degree of inequality among poor people.

**Poverty line** – is an income limit necessary for man’s minimum needs serving, introduced in the republic against economical possibilities.

**Subsistence minimum** – is the minimum per capita income equal to the cost of the minimum consumer basket.

**The minimum consumer basket** – is a minimum set of goods and services in natural and cost values. The minimum consumer basket consists of the food basket cost (60%) and expenditures for non-food items and services (40%).

**Vertical segregation** – characterizes uneven distribution of women and men by official capacity hierarchy.

## MDG 2. Achieve universal primary education

**Access (to education)** – the real opportunities of a school-age person to attend school. Access depends on the availability of schools within an easily reachable distance from one’s home and the appropriateness of the instruction with regard to the economic conditions of attending, special conditions for students with special needs, and the language of instruction.

**Child** – a person under 18 years old

**Children in social risks** – children for whom access to and completion of free general secondary education is at risk, because they are in difficult life situation with one or several social risks and they can not overcome those difficulties independently or with help of their families (children with special needs, from multi-children families or socially disadvantaged families, have conflict



with law, orphans or deprived of parental care, street children, victims of home violence, HIV-infected and others).

**Education** – the continuous process of training and upbringing to achieve a high level of moral, intellectual, cultural, and physical development, the professional competence of the members of society.

**Everyone-Is-Educated (VseObuch)** – Soviet state education policy aimed for 100% enrolment by compulsory, full and free secondary education.

**Final state testing of students** – a procedure arranged to determine the degree of mastery of the national mandatory standard of the corresponding educational level with the certificate to be issued on the result of this procedure (certificate, graduation certificate, license, or diploma).

**GSGE** – Government Standard of General Education.

**Inclusive education** – a set of organizational and technical conditions, pedagogical methods, and dispositions supported by organizational culture, which allow special-needs students to attend mainstream schools instead of learning in closed institutions.

**Informatization of education** – providing schools with ICT infrastructure; the basic content to be used for learning and teaching purposes in the virtual environment.

**Intermediate monitoring** of learning achievements is performed in a form of exam after completion of 4th and 9th grades in order to pass from primary level to basic (from grade 4 to 5) and from basic to upper secondary education level (from grade 10 to 11).

**Life Long Learning (LLL)** – the concept of learning as a process that continues throughout life to address an individual's learning needs in many forms and at many levels (EFA Global Monitoring Report. UNESCO. Paris. 2007).

**National policies in education** – decisions taken at national level about the aims, expected outcomes, and ways of functioning of the education system at all levels. The emerging focus of national education policies internationally is ensuring access to education at all levels and for people of all ages, and improving the quality of education.

**Oblast** – an administrative territorial division in Kazakhstan (14 oblasts in total)

**Pre-school education** – first level of education services and programs for children of 1-6 (7) years in the country. It targets early childhood development on physical, intellectual and psychological health.

**Quality of education** – complex characteristics of the process and outcome of learning with a view to their appropriateness to the student and level of achievements vis a vis expected outcomes and set targets.

**Small-scale school** – a general school with a low number of pupils, combined classes, and with a specific form of studies.

**Unified National Testing (UNT)** – Unified National Test is the state attestation measure in form of secondary school exit test that is unified with the higher education entry exams.

## MDG 3: Promote Gender Equality and Empower Women

**Gender analysis** – the analysis of the impact that proposed or existing programs, legislation, and policies have on women and men; data collection and the detection of gender-related trends in economy and social life.

**Gender budget** – a methodology based on a gender approach to budget formulation and administration.

**Gender development index** – the adjusted human development index that measures the average achievements of men and women in the three basic dimensions captured in the human development index (average life expectancy, access to education, and adjusted real income).

**Gender equality** – the feature of society in which women and men have equal access to public resources and participate equally in social governance.

**Gender stereotypes** – social stereotypes based on a traditional understanding of femininity and masculinity and their hierarchy.

**Oralman** – ethnic Kazakhs who have migrated to Kazakhstan from other countries, where they have been living due to historical or other reasons.

**Violence against women** – aggressive behaviour of men towards women to establish authority and compensate inner complexes, manifested through psychological, physical, sexual, and economic violence.

## MDG 4: Reduce Child Mortality

**Child mortality** – the number of deaths of children aged from 1 to 5 years per 1,000 live births.

**Government finance of public health** – providing of guaranteed volume of free healthcare, financed from the local budgets, the implementation of the republican programmes.

**Infant mortality** – the number of infants who died in the first year after birth per 1,000 live births.

**Maternal mortality** – the annual number of deaths of women caused by pregnancy and birth complications per 100,000 live births.

**Neonatal mortality** – infant deaths during the first 28 full days after birth per 1,000 live births.

## MDG 5: Improve Maternal Health

**Antenatal care** – care that includes measuring arterial pressure, weighing, blood test and urine test and birth attendance provided by a qualified specialist: doctor or a midwife.

**Health** – WHO defines health as the state of complete physical, mental and social well-being and not only absence of illness or infirmity.

**Maternal mortality** – according to definition of the World Health Organization (WHO) the concept of maternal mortality covers mortality among women in pregnancy or within 42 days after delivery due to any reason, directly related to pregnancy or due to condition that gets aggravated by pregnancy or its management (except accidents). WHO recommends defining maternal mortality rate as the number of maternal deaths per 100 thousand live-births.

**Modern contraceptive technologies** – WHO definition of modern contraceptive technologies includes: female and male sterilization, injective and oral hormonal drugs, intrauterine devices (loops), diaphragms, spermicidal and condoms.

**Screening programs** – antenatal diagnostics of fetus innate and hereditary diseases with the use of genetic analysis and family planning modern technologies.

## MDG 6: Combat HIV/AIDS and Tuberculosis

### HIV/AIDS

**AIDS** – acquired immune deficiency syndrome, the final stage of HIV infection.

**SW** – “sex workers” – people who engage in sexual contacts for money or other goods/benefits with people who seek sexual satisfaction. Such terms as ‘prostitute’ are generally avoided as they bear a negative connotation.

**Drugs (narcotics) (Greek *narkotik* s** – intoxicating, bringing to the state of stupor) – a group of substances of various nature (vegetative, of synthetic origin), the abuse of which leads to drug addiction.

**Drug addiction (narcotism)** – a person’s dependence on drug intake; the disease when a body’s vital functions are sustained at a certain level only under the condition of the continuous intake of narcotic substances, leading to the severe exhaustion of physical and mental functions. Drastic termination of narcotic intake leads to the interruption of many functions of an organism.

**Hepatitis C** – an infectious liver disease caused by a virus which is mostly transmitted by blood.

**Heroin** – a narcotic drug, a morphine derivative that causes euphoria and addiction.

**HIV** – Human Immunodeficiency Virus.

**STI** – sexually transmitted infections; the term is used instead of the obsolete “venereal diseases”, and unites a wide range of infections, including syphilis, gonorrhoea, urogenital chlamydiosis, trichomoniasis, and others.

**PLH** – people living with HIV/AIDS; the term includes both HIV-positive people and their families.

**Syphilis** – a sexually transmitted infectious disease caused by *Treponema pallidum*.

## Tuberculosis

**DOTS** – the global tuberculosis control strategy recommended by the World Health Organization.

**DOTS – Plus** – the multi-drug resistant tuberculosis control strategy recommended by WHO and based on the use of second-generation medications.

**Multi-Drug Resistant Tuberculosis (MDR TB)** is TB that is resistant to at least two of the best anti-TB drugs, isoniazid and rifampicin. These drugs are considered first-line drugs and are used to treat all persons with TB disease.

**Tuberculosis** with multiple pathogen drug resistance (TB MDR) is TB that is resistant to at least two of the best anti-TB drugs, isoniazid and rifampicin. These drugs are considered first-line drugs and are used to treat all persons with TB disease.

## MDG 7: Ensure Environmental Sustainability

**Green House Gas (GHG)** – gas that absorbs radiation: a gas that contributes to the warming of the Earth’s atmosphere by reflecting radiation from the Earth’s surface, e.g. carbon dioxide, ozone, or water vapor.

**Trans-regional ecosystem approach** – it stipulates introduction of a set of limitations, regulations and rules of economic activity that define permissible limits of the use of natural resources and ensuring balanced environment quality management.

## MDG 8: Develop a global partnership for development

**Free economic zones (FEZ)** refer to special zones where normal trade barriers such as import or export tariffs do not apply. Bureaucracy is typically minimized by outsourcing it to the Free Economic Zone operator and corporations setting up in the zone may be given tax breaks as an additional incentive.

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## **Photo:**

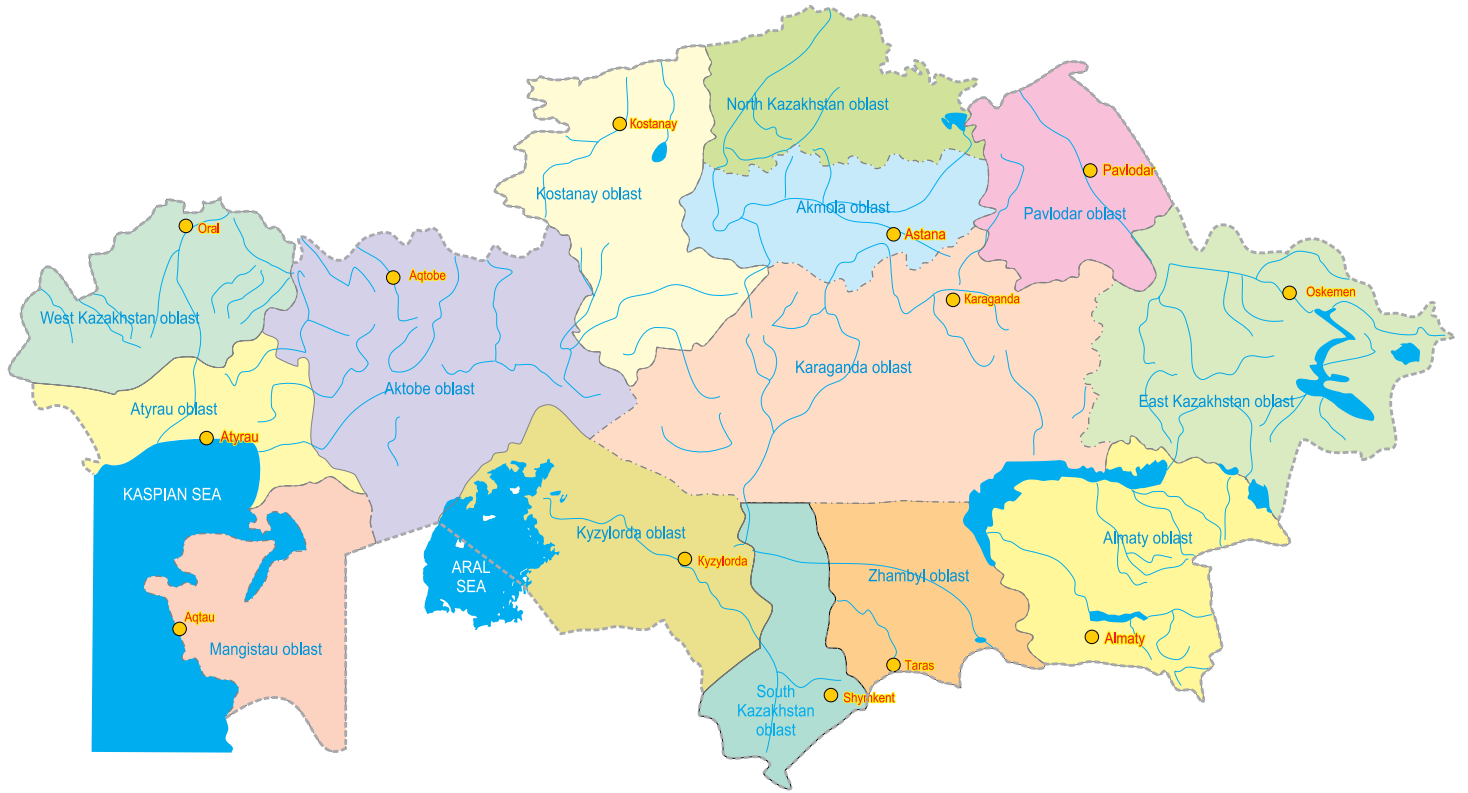
Zh. Kulenov  
UNDP  
UNICEF  
UNAIDS

## **Design and layout**

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## **Published:**

Printing house "Agroizdat", Astana





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