

MILLENNIUM DEVELOPMENT GOALS



Goal 1. Eradicate extreme poverty and hunger



Goal 2. Achieve universal primary education



Goal 3. Promote gender equality and empower women



Goal 4. Reduce child mortality



Goal 5. Improve maternal health



Goal 6. Combat HIV/AIDS, malaria and other diseases



Goal 7. Ensure environmental sustainability



Goal 8. Develop a global partnership for development

Contacts:

UN House

The Kyrgyz Republic, Bishkek, 720040

Tel.: +996 312 611 211

www.un.org.kg

The Kyrgyz Republic

THIRD REPORT ON PROGRESS TOWARDS ACHIEVING THE MILLENNIUM DEVELOPMENT GOALS

2013



UNITED NATIONS

The Kyrgyz Republic

**THIRD REPORT
ON PROGRESS TOWARDS ACHIEVING
THE MILLENNIUM DEVELOPMENT GOALS**

2013

Bishkek, 2013

УДК 323/324
ББК 66.3 (2 Ки)

T 47

T 47 The Kyrgyz Republic: Third report on progress towards achieving the Millennium Development Goals:
B. 2013 - 132 p.

ISBN 978-9967-11-388-6

Head of the Authors' Group:

Rafkat HASANOV

Authors Group:

Rafkat HASANOV
Nuria CHOIBAEVA
Gulnura DYIKANBAEVA
Lubov TEN
Aizhan MAMATBEKOVA
Irina LUKASHOVA
Anara MOLDOSHEVA
Gulmira NAJIMITDINOVA
Gulgun MURZALIEVA
Larisa BASHMAKOVA
Rakhat CHOLUROVA
Vladimir GREBNEV
Talaibek KOICHUMANOV
Ekaterina MOKROUSOVA

Coordinated by:

Nuria Choibaeva

Preparation, editing, translation, budget, administering

Nuria CHOIBAEVA
Kemal IZMAILOV
Mira DJANGARACHEVA
Gulnura DYIKANABEVA
Jyldyz BEKENBAEVA
Antony BURNETT
Vitaly LIAN
Akylay OSMONALIEVA
Polina KOTULEVA
Meerim SARYBAEVA
Aigul BOLOTOVA
Nurzat ALYBEKOVA

The opinions expressed in this publication are solely those of the authors and do not necessarily reflect the opinions of the United Nations, or the Government of the Kyrgyz Republic. The designations employed do not imply the expression of any opinion whatsoever concerning the legal status of any country, territory or area or its frontiers or boundaries.

T 0803010200-13
ISBN 978-9967-11-388-6

УДК 323/324
ББК 66.3 (2 Ки)

© UN Kyrgyzstan, 2013

All rights reserved. Reference to UN is required for reproduction and transmission

Content

	List of Abbreviations	4
	Foreword	6
	Introduction	8
	Goal 1. Radical Reduction of Extreme Poverty	11
	Goal 2. Achievement of universal secondary education	27
	Goal 3. Promote gender equality and empower women	37
	Goal 4. Reduce child mortality	49
	Goal 5. Improve maternal health	63
	Goal 6. Combat HIV/AIDS and other diseases	75
	Goal 7. Ensure environmental sustainability	95
	Goal 8. Develop a Global Partnership for Development	113
	Conclusion	126
	Annex 1	128
	Annex 2	130

List of Abbreviations

ACTED	Agency for Technical Cooperation and Development
ADB	Asian Development Bank
AEI	Acute Enteric Infection
AFEW	AIDS Foundation East-West
AMANF	Average Monthly Allowance for Needy Families
ARI	Acute Respiratory Infection
ARV	Antiretroviral Therapy
BF	Breast-Feeding
BFHI	Baby Friendly Hospital Initiative
CCCC	Coordination Commission on Climate Change
CDS	Country Development Strategy
CIS	Commonwealth of Independent States
DFID	Department for International Development
DHR	Demographic and Health Research
ECS	Emergency Call Service
EPC	Effective Perinatal Care
FAO	Food and Agriculture Organization of the United Nations
FGP/FAP	Family Group Practitioners/ First Aid Points
FMC	Family Medicine Center
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GIZ	German Society for International Cooperation
GMI	Guaranteed Minimum Income
GMO	Genetically Modified Organism
HCFC	Hydrochlorofluorocarbons
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
ICOHCCS	International Charity Organization providing Health Care in Crisis Situation
ICRC	International Committee of the Red Cross
ICT	Information and Communication Technologies
IDU	Injecting Drug Users
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illness
KfW	German Development Bank
LSA	Local State Administration
LSG	Local Self-Government
LSGA	Local Self-Governance Authorities
MAF	Millennium Development Goals Acceleration Framework
MBFS	Minimum Budget Financing Standards
MDG	Millennium Development Goals
MDR-TB	Multidrug-Resistant Tuberculosis
MES	Ministry of Education and Science
MFA	Ministry of Foreign Affairs
MICS	Multiple Indicator Cluster Survey
MST	Methadone Substitution Therapy
MTBF	Medium-Term Budget Framework
NAEA	National Assessment of Educational Achievement at grades 4 and 8

NAP	National Action Plan
NCCC	National Climate Change Committee
NCO	Non-Commercial Organization
NET	Nationwide Education Test
NSC	National Statistical Committee
NTC	National Tuberculosis Center
ODA	Official Development Assistance
PHC	Primary Health Care
PIP	Public Investment Programme
PLHA	People Living with HIV/AIDS
PMU	Programme Management Unit
PWD	People with Disabilities
RDWUPA	Rural Drinking Water Users Public Association
RIC	Republican Immune Prophylaxis Center
RMIC	Republican Medical Information Center
RWSSP	Rural Water Supply and Sanitation Project
SAEPF	State Agency for Environment Protection and Forestry
SBP	State Benefit Programme
SDC	Swiss Agency for Development and Cooperation
SDW	Solid Domestic Wastes
SEP	Syringe Exchange Points
SES	Sentinel Epidemiological Surveillance
SME	Small and Medium Enterprises
SNP	State Nature Park
SPNT	Specially Protected Natural Territories
SPS	State Penetentiary System
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infections
SWAp	Sector-Wide Approach
UN	United Nations
UN FCCC	United Nations Framework Convention on Climate Change
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
VETA	Vocational Education and Training Agency
VHC	Village Health Committees
WB	World Bank
WHO	World Health Organisation
WUA	Water Users Association
X-DR TB	Extensively Drug-Resistant Tuberculosis
ZAGS	Office of Vital Records

“Notwithstanding some progress in accomplishment of commitments under the Millennium Declaration, yet there are many problems that require immediate solutions”

Quoted from the National Sustainable Development Strategy of the Kyrgyz Republic for 2013-2017 approved by the Decree of the President of the Kyrgyz Republic, 21 January 2013

“Now is the time to step up our efforts to build a more just, secure and sustainable future for all”

Quoted from the statement of the United Nations Secretary General Mr. Ban Ki-moon at the annual session of the Economic and Social Council (ECOSOC), 1 July 2013

Foreword

The Millennium Declaration and Millennium Development Goals (MDGs), unanimously approved by Member States during the United Nations Summit in 2000, have determined the development vectors and priorities until 2015. Progress towards the MDGs for the Kyrgyz Republic is intimately linked to specific interventions and attainment of national indicators in the context of the country's development.

The current National Report is the third since 2000. The analysis conducted for the report suggests that despite significant internal and external challenges and risks, the interventions undertaken by the Kyrgyz Republic enabled progress towards achieving the MDGs.

Poverty levels in the Kyrgyz Republic remain an urgent social and political challenge that threatens sustainable development in the long term. Although the minimum subsistence level is low, for many people, in particular vulnerable groups, it remains beyond attainment. Child poverty is a major concern. Many children are left unattended; and many others do not attend pre-schools or schools.

Inadequate maternal health care and high mother and child mortality are among the major concerns in the Kyrgyz Republic (as well as for other countries in transition). The growing incidence of HIV infections and the morbidity rate for other dangerous communicable diseases also pose a serious challenge to the sustainable development of the country.

The disparity in the level of development of different regions – and in the well-being of people living in those regions – has not yet been overcome. Living standards in rural areas are significantly below those in urban areas. However, for the first time an increase in poverty is reported in urban areas.

The development of the economy remains vulnerable to the impact of external and internal factors. Economic growth has not yet gained sufficiently to be conducive to sustainable human development.

All of these challenges require the attention of the government and the donor community in mobilising additional funds and other

resources to implement innovative approaches and preventive actions to improve the situation.

In the meantime, the Kyrgyz Republic is undertaking intensive efforts aimed at building and strengthening the democratic state, ensuring sustainable development, overcoming internal problems, the legacy of the past, and preventing emerging risks and challenges.

The National Sustainable Development Strategy has been elaborated (as of January 2013) following the initiative of Almazbek Atambayev, President of the Kyrgyz Republic, in partnership with government agencies, civil society and international organizations. A number of additional national strategies and programmes have also been developed.

The national strategic documents constitute the essential tools for sustainable development, as well as for achievement of the MDGs. The principles of sustainable development have been integrated into national strategies and programmes with the focus on strengthening the economic, environmental and social dimensions and preventing the depletion of natural resources.

The implementation of the Millennium Declaration and MDGs in the Kyrgyz Republic has generated impetus to improve partnerships with all development stakeholders, at both national and international levels.

The Kyrgyz Republic in recent years is consistently at the highest level, including the tribute of the United Nations during world summits, reaffirming its commitment to achieving the MDGs by maintaining close partnerships with the international community on issues of long-term sustainable development.

The Kyrgyz Republic along with many other countries has participated in pilot programmes and projects in a number of areas related to determining the global development agenda post-2015. Important new initiatives include:

- Active involvement in the process of preparing and participating in the Rio+20 Summit (June 2012). The agreements reached thereof are reflected in the National Sustainable Development Strategy of the Kyrgyz Republic for 2013-2017 (taking into account the pre-defined national priorities).
- Conducting situational analysis of maternal health care and developing the National Action Plan to 2015 (in 2013) – in partnership with the United Nations MDG Acceleration Framework (MAF) – to accelerate progress towards achieving the MDG 5 on improvement of maternal health in health-care and reducing maternal mortality.
- Conducting a nationwide survey and national consultations (in 2013) on the priority development trends post-2015, showing that the most urgent areas include economic growth and employment, good governance, education, food security and agricultural development, health, peace and security.

An important testimony to the constructive partnership for development was the High Level Development Conference held in July 2013 in Bishkek, attended by leaders and representatives of government agencies of the Kyrgyz Republic and civil society organizations, donor countries, international financial institutions and the United

Nations system. The implementation of the agreements made during the conference will also contribute to the promotion of sustainable development in the Kyrgyz Republic.

The National Council for Sustainable Development chaired by the President of the Kyrgyz Republic, the Development Partners Coordination Council under the Government of the Kyrgyz Republic and co-chaired by the Prime Minister of the Kyrgyz Republic and representatives of development partners (currently the United Nations Resident Coordinator in the Kyrgyz Republic), and the Coordinating Committee on MDGs in the Kyrgyz Republic headed by the Deputy Prime Minister of the Kyrgyz Republic are all actively working towards sustainable development.

There are less than two years until the deadline of 2015 specified in the Millennium Declaration for achieving the MDGs. The current report depicts the situation in the Kyrgyz Republic, recognising the need to address crucial challenges and risks related to sustainable development, and outlining the strategic vision of the country's development as reflected in national policies and programmes and close cooperation with development partners. We hope that the analysis will encourage an increasing focus among all development partners in overcoming the most pressing challenges for the benefit of the people of the Kyrgyz Republic.

T. Sariev

Minister of Economy of the Kyrgyz Republic

A. Avanesov

United Nations Resident Coordinator,

UNDP Resident Representative in the Kyrgyz Republic

In 2000, the Millennium Declaration set 2015 as the year by which the Millennium Development Goals (MDGs) should have been achieved. The midpoint year was 2008 and so the trends that exist now will, to a large extent, define the opportunities for achieving the MDGs by 2015.

The present report on the Kyrgyz Republic's progress toward achieving the MDGs (the third report of its kind) is a joint initiative of the Government of the Kyrgyz Republic and the United Nations (UN) system in Kyrgyzstan.

The first MDG progress report was prepared in 2003, the second in 2008 (with an additional review of the second report in 2010). The purpose of the first report was to modify and localise MDG targets as appropriate for the Kyrgyz Republic. This was achieved, based on a broad consultative process that involved public agencies, representatives from civil society and international organizations.

Progress indicators were developed for each target on the basis of the statistical information available at that time. The base values for the indicators to be used to evaluate progress in achieving the MDGs were defined. Target values for the majority of indicators were also defined (the first report did not contain specific target values for several indicators, noting only that the indicators might be used to monitor progress).

The second MDG report analysed progress made towards the achievement of the MDGs during 2003-2007, using the indicators proposed in the first report (as well as those used in state strategies and programmes) and proposed recommendations and further economic and social policy measures to achieve the goals.

The additional review and revision of the second report in 2010 integrated new analyses examining the impact of the global economic crisis and climate change on the achievement of the MDGs and provided examples of the country's positive experiences in accelerating progress towards achieving the Goals. The MDGs review proposed looking at the consequences of the political events and inter-ethnic clashes in 2010 on each Goal.

The MDGs can only be effectively achieved if they become critical components of state policy. Thus, progress toward the Goals must be reviewed through the prism of the degree of integration of the MDGs into social and economic development policy documents¹.

The recently adopted 'President's Sustainable Development Strategy' is an important conceptual document that reflects the medium-term vision of Kyrgyzstan and sets the country's direction for the period 2013-2017. The Strategy document takes into consideration new trends and challenges that affect the most vulnerable citizens of Kyrgyzstan and creates the foundation for sustainable development after 2015. The establishment of the Sustainable Development Council in 2012 was an important step towards enabling the consolidated development efforts. The preparation of this MDG report 2013 coincided with national consultations on the post-2015 development agenda. Contributors to national consultations considered that the core issues of future development should encompass economic growth and employment, public administration, conflict resolution and mitigation of instability. The MDGs – even if they are met – will not necessarily move the world onto a sustainable development trajectory. However, as far as possible, sustainable development goals are needed to build on the MDGs, with quantified indicators to monitor progress. Therefore, the third MDG report – in addition to reflecting on national milestones related to the MDGs, their influence on the country's development agenda and analysis of trends and inequalities – looks at the post-2015 agenda and emerging issues.

This third report highlights notable progress on a number of MDGs targets. According to expert opinion, Kyrgyzstan is likely to achieve MDG 4 (Reduce child mortality). In a Global Assessment of surveillance of mothers, newborns, and children, Kyrgyzstan for the first time was ranked among 15 countries which are on the way towards achieving MDG 4². This confirms the need to continue – and reinforce – ongoing interventions aimed at reducing child mortality in the country.

In 2012, Kyrgyzstan launched the application of MDGs Acceleration Framework focusing on improving maternal health and reducing maternal mortality (MDG 5). The framework brought together a wide range of actors to analyse why – despite a range of strategies and plans – progress towards achieving MDG 5 was proceeding slowly. Bottlenecks and constraints were identified and action plans to address them designed and endorsed by national partners.

In the preparation of this report, the authors used United Nations Development Group's 2013 Addendum³ to the MDG Country Report

1 It should be noted that the first policy document to include the achievement of the MDGs as a part of public policy was the 'Manas Taalimi' health care reform programme for 2006-2010, approved on 16 February 2006

2 <http://www.countdown2015mnch.org/documents/2012Report/2012-complete-no-profiles.pdf>

3 http://www.undp.org/content/dam/undp/library/MDG/UNDG%20MDG%20Country%20Report%20Guidelines_2%20May2013.pdf

Guidelines (and relevant portions from guidance issued earlier). More specifically, these guidelines advised on drawing upon the evidence to date so as to:

1. Take stock at the country level of status and trends in MDG achievement⁴, retaining a focus on success, challenges, and bottlenecks to progress at national at sub-national levels (2010 Addendum and 2013 Addendum, Section II and Annex A⁵);
2. Document key milestones with regard to the adoption/adaptation of the MDGs in the country and provide a critical assessment of the value added of the MDGs for national/sub-national development (2013 Addendum: Section I and Annex C);
3. Provide an analysis of emerging development challenges faced by the country and how those affect MDG progress, including in equalities along various dimensions, and especially what they mean for the achievement of the unfinished MDG agenda (2013 Addendum: Section III).
4. Extract lessons from the implementation of the MDG agenda to inform the post 2015 development agenda, including establishing baselines and recording documented policy priorities for key emerging issues such as resilience, food security, changing health profiles, inequality and others (2013 Addendum: Section III).

The authors also used gender mainstreaming approach, which calls for a situation analysis on the basis of gender disaggregated data. This was undertaken not only with respect to progress towards MDG 3 (Promote gender equality and empower women), but also in relation to all other MDGs.

The preparation of the third MDG report involved wide consultation with representatives of state agencies, civil society and international organizations. The consultations particularly benefitted from the level of interest shown by the ministries responsible for the formulation of sectoral policies. It is expected that the present report will become a tool for analysis of the current situation and consequently contribute to decision making at the national level.

4 This section can be mainstreamed across the respective chapters describing the status and trends of the goals in the report

5 An open source tool, based on Google Fusion Tables, is available for generating maps to demonstrate the status and trends of MDG targets at the subnational level



GOAL 1.
RADICAL REDUCTION
OF EXTREME POVERTY



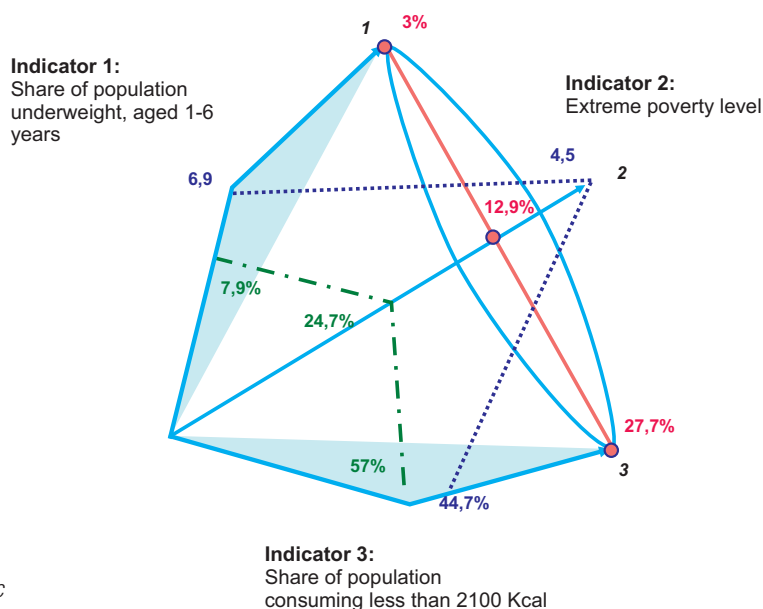
Goal 1. Radical Reduction of Extreme Poverty

TARGETS

halve the extreme poverty rate

halve the proportion of people who suffer from undernourishment

Figure 1. Progress towards MDG 1 target indicators⁶



Source: National Statistical Committee of the Kyrgyz Republic

1. Current situation and trends

Unlike previous reports, the third report aims to put more focus on both targets whereas it considers the issues related to reduction of the number of hunger in a close nexus with poverty reduction.

Kyrgyzstan achieved its target of reducing extreme poverty in 2008. The trend of a decline in extreme poverty continued until 2010, however, the political events of 2010 have reversed this positive trend. The global financial crisis in 2008 led to a slowdown in economic growth in 2009 (to 3.9 percent), higher food prices and reduced remittances from labour migrants.

President Bakiev's denial of democratic reforms, together with wrongful actions of his government instigated the change of power in April 2010, which was followed by inter-ethnic conflict in the south of the country. The conflict caused human deaths, together with the destruction of buildings and infrastructure, the latter affecting much of the business sector. The consequences also included difficulties with the supply of oil and lubricants (and higher prices), closed borders with Kazakhstan and Uzbekistan, reduced aggregate demands

and other adverse factors that inhibited normal economic activities and adversely affected the overall socio-economic situation.

The sectors of retail trade, services, construction and tourism were the most badly affected. Retail markets where a large number of citizens generate income were significantly affected. The temporary closure of borders for movement of labour migrants to Russia and Kazakhstan increased the supply of the workforce in the domestic market that was already struggling. The events of 2010 led to a decline in Gross Domestic Product (GDP) of 1.4 percent.

The abovementioned factors also resulted in progress towards reducing poverty in 2010 reversed, with the level of extreme poverty increasing from 3.1 percent to 5.3 percent in 2010.

The new government took measures to stabilize the economy and enhance social support to the poor. To alleviate the impact of rising global commodity prices in 2011, the salaries of social workers were raised, pension accruals and compensations were also increased and financial assistance was provided to low-

⁶ This figure is outlined in detail in the second MDG report, known as the MDG diamond. Please see page 156 of the report for further details (in short: red colour represents the target indicators; green – baseline indicators; and blue – actual recent data. The entire set of indicators is outlined in Annex 2



income families. As a result of these measures, in 2011 Kyrgyzstan reached an economic growth rate of 5.7 percent and 12 percent lower inflation in comparison with 2010 (from 19.5 percent to 7.5 percent). The proportion of extremely poor people fell to 4.5 percent.

The second target of MDG 1 is evaluated using two indicators. The first indicator tracks the dynamics of decline in the share of the population consuming less than 2,100 kcal a day. The trend of this indicator correlates with the dynamics of extreme poverty, although here the target indicator is not reached. Before 2009, a substantial improvement took place in reducing the proportion of undernourished people in the country, from 60.5 percent in 2001 to 40.7 percent in 2009 (see Figure 2 below). However, the situation subsequently deteriorated and the gap with the target indicator – which is 27.7 – began to increase.

The second indicator for MDG 1 assesses the dynamics of reducing the proportion of underweight pre-school children by 2015. The average share of underweight children aged from 1 to 6 years was on a downward trend at the end of the 2000s. However, in 2010, the indicator on share of underweight children worsened significantly and despite a slight improvement in 2011, the gap between the current indicator and the target of 3.0 percent is significant.

The methodology and indicators to measure food security in Kyrgyzstan can be improved. Recently, international organizations have been assisting in introducing new approaches towards that will improve the assessment of the problem and help the government generate evidence-based information for socio-economic policies and programmes. Boxes 1 and 2 below present two methodological approaches, which provide information on different aspects of the problem, as well as the different dynamics of its development.

While reviewing the outcomes of such efforts it is necessary to keep in mind that national institutions (the National Statistics Committee [NSC] and the Ministry of Economy) do not apply these approaches. A major task will be to align the new approaches and methods with the national system.

The events of 2010 significantly affected general poverty levels, increasing the share of the poor from 1.2 percentage points and increased up to 38 percent in 2012 (the highest figure over the last five years). The number of people living below the poverty line stands at 2,15 million. In 2010-2011 there was an increase in the depth of poverty (the average deviation of the income of poor households from the poverty line) to 7.7 percent and in its severity (the degree of differentiation in consumption by the poor) to 2.4 percent.

Box 1. Food Security Assessment by the United Nations World Food Programme (WFP)

The Food Security Assessment is a survey conducted by the United Nations World Food Programme (WFP). The indicator for food security is calculated by combining the food consumption level (frequency and variety) with the level of economic access to food (the poverty line based on household income). The calculation is based on statistically representative data at country level, by urban and rural areas and seven oblasts and Bishkek. The sampling covers 2,000 households across the country. The calculation method is outlined in the Table below.

Economic access to food (income rate)	Scores on food consumption		
	Poor	Borderline	Satisfactory
Low	% of extremely poor rate of food security	% of extremely poor rate of food security	% of low rate of food security
Medium	% of extremely poor rate of food security	% of low rate of food security	% of satisfactory rate of food security
Satisfactory	% of low rate of food security	% of satisfactory rate of food security	% of satisfactory rate of food security

WFP conducted an assessment during the emergency of August 2010 to determine the impact of events on food security levels. This assessment served as a baseline indicator for monitoring food security and coping strategies, reflecting trends related to harvests and food prices and the impact of the 2010. The assessment determined that 27 percent of the population had were food insecure. In March 2011, the figure had risen to 46 percent as a result of food shortages before the spring harvest, increases in food prices and the impact of the 2010 events. Follow-up assessments of food security were conducted twice a year during 2011-2013 to compare new trends. The WFP data on food security corresponds to that of the National Statistics Committee (NSC), demonstrating the worsening of the nutrition situation in 2011. The results in the second half of 2012 also indicate negative trends reflecting increases in food prices. The most recent evaluation was conducted in March 2013 and shows a slight improvement in the situation in advance of the harvest season.



Box 2. Assessment of the proportion of people suffering from hunger by the Food and Agriculture Organization of the United Nations (FAO)

The incidence of the extent of malnutrition is calculated at the national level by estimating the distribution of habitual caloric consumption by the average individual in the population (that is the probabilities associated with possible levels of average habitual daily caloric consumption in the country). The assessment is based on the following information:

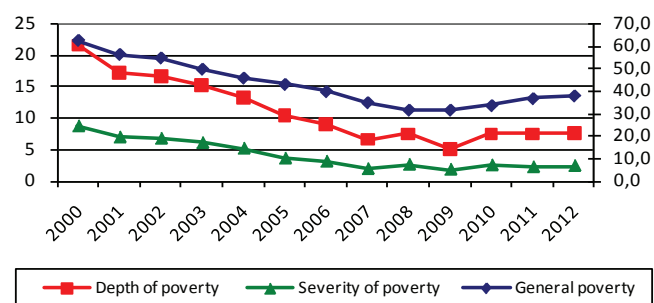
- the aggregate caloric availability obtained from FAO Food Balance Sheets,
- an estimate of the incidence of losses occurring on food that is distributed at the retail level, and
- an estimate of the inequality in the distribution of food access in the population (as summarized by the coefficient of variation and the skewness).

After obtaining the distribution data, the probability that the calorie intake is lower than the minimum amount required for an active and healthy life for the average person, is calculated.

FAO's results show that the number of people suffering from malnutrition has decreased from 15.5 percent in 1992 to 6.2 percent in 2012.

Figure 2. Poverty dynamics, depth and severity

The dynamics of the depth and severity of poverty are consistent with general poverty trends (see Figure 2). There was a noticeable reduction in poverty during 2000 to 2005, followed by a more moderate decrease in the period up to 2010. The latter testifies to the increased gap between extremely poor income value and the general poverty line. It must be emphasized that the stratification of the population by income in Kyrgyzstan continues to increase, in particular, the R80/R20⁷ ratio has increased from 6.8 in 2010 to 7.3 in 2011.



Source: National Statistical Committee of the Kyrgyz Republic

The multidimensional nature of poverty in Kyrgyzstan

Poverty is a multi-faceted phenomenon. The indicators under consideration do not take into account the following important aspects:

Absence of access to basic services

In rural areas, access to services such as water supply, collection of solid waste and sewerage is limited for all the population, due to difficulties in delivering such services in mountainous regions. In urban areas, the poor population have lower access to services such as central heating, hot and cold water supplies, bathrooms/showers, sewerage systems, central gas supplies and telephone lines, compared to the better-off population. However, even among the non-poor urban population, one-third of people have no access to at least one of the services listed above. In 2011, over 53 percent of

the extremely poor population had on average only 10 to 20 square metres of living space per capita. Both the rural and urban population have access to electricity supply, although a sustainable uninterrupted supply was reported by only 11.7 percent of households and regular power outages were observed by 62 percent. Only 34.7 percent of urban households and 2.1 percent of rural households have access to centralized heating; 21.1 percent of households have access to a gas pipeline network (49.1 percent urban households and 6 percent, rural); and only 25.5 percent of households are connected to the public water supply (with urban households 46.2 percent higher than rural ones). The availability of clean drinking water is an indicator of quality of life, as it has a significant impact on the population's health: In 2011, access to clean drinking water fell by 1.2 percent to 90.8 percent.

7 This ratio shows to what extent the consolidated income of the 20 percent of the wealthiest segment of the population exceed the income of the 20 percent of the poorest segment



Child poverty

The child poverty rate, which is above the national average, is a serious social concern. According to the findings of the integrated sample survey of households in 2011 by the NSC, 44.6 percent of children under 17 years of age lived in poverty and 5.6 percent are classified as extremely poor. The child poverty rate in rural areas was 47.6 percent, 8.9 percent higher than in urban areas.

Child poverty is influenced by a number of factors. The availability of at least one employed family member significantly reduces the risk of extreme child poverty. The probability of child poverty in households comprising women of unemployable age who completed secondary education is three times higher than among children living in households where there is at least one woman of employable age who has higher education. Other factors include the number of children, the presence of disabled people in a family and others⁸.

Children living in poor families are faced with many challenges, including access to quality social services and infrastructure. They suffer poverty more severely due to their greater vulnerability, and are likely to have limited future opportunities.

Regional differentiation of poverty

Child poverty is characterised by regional disparities. The United Nations Children's Fund (UNICEF) national study on child poverty noted that child poverty varies from 6.8 percent in Bishkek to 57.1 percent in Jalal-Abad oblast and 56 percent in Osh oblast⁹. Welfare disparities in poverty rates had been declining in Kyrgyzstan since 2004 mainly because of the significant decline in poverty in rural areas and the slight increase in Bishkek. Nevertheless, there is a large difference between Bishkek and other areas in terms of general poverty levels: 21.4 percent of the population was below the poverty line in Bishkek in 2012 compared to 35.4 percent in urban areas and 39.6 percent in rural areas in 2012.

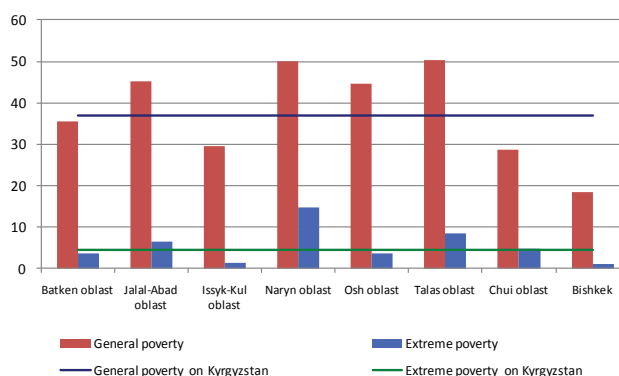
The proportion of households consuming less than 2,100 kcal/day has been reduced over the long term for all regions of the country. However, as seen in Figure 4, there was an increase in six out of eight regions in 2011 compared to 2009. Significant increases were reported in Bishkek (by 13.8 percent) and in Naryn Oblast (by 9.8 percent).

Urban and rural poverty

The majority of poor people (nearly 70 percent) live in the rural areas. The incidence of poverty is higher in rural areas (51 per-

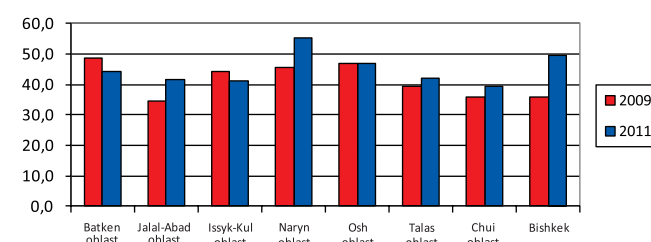
cent) than in urban areas (30 percent). The trend of rural and urban poverty broadly follows the dynamics of general poverty: a decline in 2009 and increasing in 2010-2011, with the rates of extreme poverty in cities lower more than the general rate (by 30 percent) (see Figure 5).

Figure 3. Poverty rate by oblast (%)



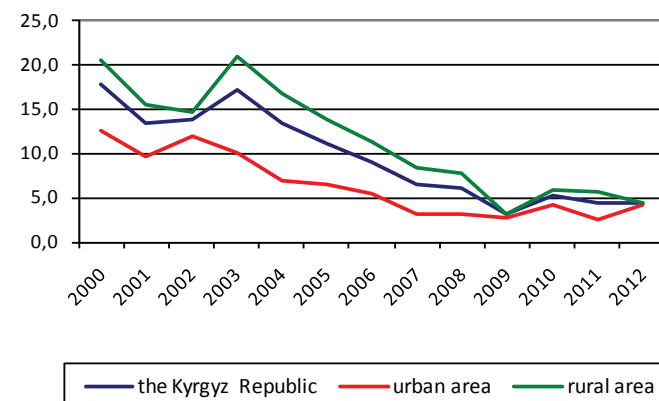
Source: National Statistical Committee of the Kyrgyz Republic

Figure 4. Proportion of the population consuming less than 2,100 kcal/day by oblast (%)



Source: National Statistical Committee of the Kyrgyz Republic

Figure 5. Urban and rural extreme poverty rates (%)



Source: National Statistical Committee of the Kyrgyz Republic

8 National Study on Child Poverty and Inequalities in the Kyrgyz Republic. - B. 2009. UNICEF

9 National Study on Child Poverty and Inequalities in the Kyrgyz Republic. - B. 2009. - UNICEF, p.98



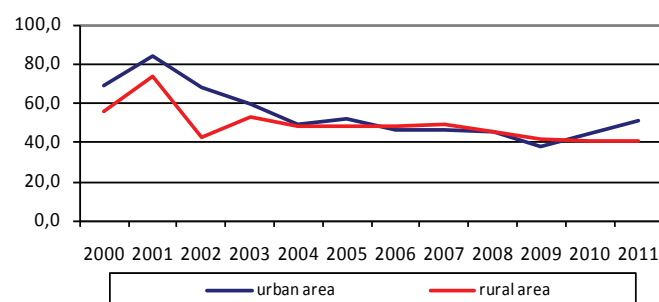
The dynamics in the decrease of percentage of households consuming less than 2,100 kcal / day has been positive over the long term in all regions of the country. Since 2010, the above factors impacted on the indicator for the worse in almost all regions. As it is seen in Figure 6, in 2011 the indicator has worsened in 6 of the 8 regions to compare with 2009. The deterioration of the situation with consumption in Bishkek (13.8 percentage points) and in Naryn oblast (by 9.8 percentage points). For the first time for the last few years, the proportion of such households in the Naryn region exceeded 50 percent¹⁰.

The differences in rural and urban poverty can be explained by the fact that the cash income of the urban population exceeds rural incomes and in cities wage income is 1.9 times higher¹¹. The rural population is dependent on agricultural production, which is not very cost-effective. Although rural residents receive income from private farming, it is generally not very productive and is at a semi-subsistence level. Moreover, despite higher rates of employment, the quality of jobs in rural areas does not enable rural residents to generate income comparable to that of urban workers. Furthermore, higher rural self-employment is closely associated with higher rates of poverty, because it implies a low-paying job and work in the informal sector, especially in agriculture.

Within regions, geographical factors, as specified in the World Bank's survey¹², have virtually no effect on the magnitude of the gap in wealth between urban and rural areas. Significant differences between urban and rural areas within oblasts exist only in Chui, Batken and Naryn oblasts. In urban areas there is a concentration of the population that have more opportunities, and migration from rural to urban areas within the oblast may lead to the equalization of income levels, caused by above-mentioned fact.

In cities, especially the capital Bishkek, there are more opportunities for running businesses in different sectors of the economy, due to the higher concentration of financial resources, developed infrastructure and greater concentration of the labour force with a higher level of education (the proportion of the population with higher professional education is almost 2.5 times higher in urban areas). Low income groups of population in the capital take much more advantage of the geographical factors than the affluent segments of the population.

Figure 6. Percentage of the population consuming less than 2,100 kcal/day in rural and urban areas (%)



Source: National Statistical Committee of the Kyrgyz Republic

Gender dimensions of poverty

Poverty usually affects both genders equally, however, a clear signal of gender inequality is that vulnerable rural women (divorced, low-income and single women) are in the most precarious situation. Employment opportunities for women are often limited as they lack experience and adequate qualifications. Despite the fact that poverty is higher among male-headed households (30 percent compared with 20.7 percent among female-headed households), poverty has a more severe impact on women, due to the fact that increased workload on women is combined with household keeping duties.

The socio-economic and legal status of women oblige them to engage in economic activities under unequal conditions and with low income. In rural areas, micro-level entrepreneurs are largely women and who are most vulnerable, being forced into self-employment as a means of combating poverty. Women usually obtain smaller loans than men and use them for household labour and small-scale trade, often reinvesting the income into the family budget, rather than in the development of the business. As a consequence, men may reduce their contribution to expenses for household maintenance¹³. Thus, micro-credit may be used only as additional support for the family.

The following factors contribute to women's poverty:

- Unfavourable trends in female employment dynamics: a decrease from 49.7 percent in 2008 to 47.1 percent in 2010.
- Gender inequality by economy sector: employment of women in the social sector and other low paid sectors.

10 The National Statistical Committee, The Integrated Household Budget and Labour Force Survey

11 The standard of living of the population of the Kyrgyz Republic 2006-2010. Bishkek, 2011

12 Aziz Atamanov, Regional differences in the level of welfare of the population of the Kyrgyz Republic. The World Bank. Bishkek. 2013

13 Rural Women's Access to Economic Resources. 'El Pikir' Center of Public Opinion Study, Institute for Development Assessment Public Association - UNIFEM, 2005



- Gaps in wages between men and women: the average women's salary in 2011 was 78.4 percent of men's salaries. Higher levels of female unemployment: the unemployment gap between men and women is growing, for example, in 2005 it was 1.7 percent, but in 2011, it increased to 2.3 (which is connected to a higher rate of women's unemployment). According to the data for 2010, the share of unemployed women who looked for work for over a year was twice as high as the corresponding figure for men.

Poverty and environment

Low growth is inextricably linked with agriculture-related problems. Agriculture is the main source of livelihood for the rural population, and moreover, over the past five years there has been a steady decline in the share of agriculture in the economy (decreasing from 28.7 percent in 2006 to 17.5 percent in 2012).

Agricultural lands make up only 15 percent of the total area of the country, and in the last five years have decreased by 4.3 percent. Soil erosion and land degradation are generally a consequence of negative aspects of agricultural production, including overgrazing, inefficient use of irrigation and water management. Soil erosion is the most visible indicator of the adverse effects of unsustainable agricultural practices leading to declines in fertility and irreversible damage to the soil. Mountain pastures, which constitute 40 percent of the territory and 85 percent of agricultural land are used without proper control, leading to a reduction in the productivity of livestock.

Low yields and livestock productivity result in falling incomes for farmers and a lack of financial resources to meet the needs of the farmer's family and improve utilisation of natural resources. The depletion of natural resources in recent years have led to a significant reduction in the real base for agricultural production and increased levels of poverty, especially in rural areas.

Factors contributing to poverty reduction

The elasticity of relevant indicators contributing to poverty reduction is shown in Table 2. It represents the percentage change in the level of poverty if relevant indicators grow by 1 percent. The elasticity data shows that in relative terms the greatest impact on the pace of poverty reduction is made by GDP growth, followed by the growth of social security costs, with the increase in money transfers the least important.

Table 1. Poverty elasticities indicator¹⁴

The elasticity of poverty depending on growth rates:		
GDP	Money transfers/Remittances	Social security costs
-1.9	-0.09	-0.3

Box 3. MDG-based macroeconomic modelling

A substantial slowdown in progress towards achieving the MDGs is expected as a consequence of the global economic crisis of 2008, and rising food and oil prices in some countries. Even prior to the crisis and despite significant progress, many countries were not on track to meet many of the MDGs (as shown in United Nations MDG reports). During 2009-2013, the United Nations Development Programme (UNDP) and Development Policy and Analysis Division of the United Nations Department of Economic and Social Affairs (UN-DESA/DPAD) implemented activities to strengthen policymakers' analytical capacities in a number of developing countries including Kyrgyzstan, under the framework of the capacity development project 'Strengthening Macroeconomic and Social Policy Coherence through Integrated Macro-Micro Modelling'. The capacity development activities provided targeted support for strengthening the ability of a 'technical unit' or group of national experts from government entities and universities/research institutes to conduct development policy analyses, including the assessment of strategies to achieve the MDGs and the effects of economic crises on the achievement of the goals. UNDP Kyrgyzstan and UN-DESA/DPAD collaborated to implement activities to strengthen Kyrgyz policymakers' capacities in response to a request from the Ministry of Economic Regulation. Within the framework of the project, intensive training was provided to ensure that national experts were familiarised with an integrated macro-micro modelling framework and would be able to use results from applying this to guide policy makers. The framework comprises an economy-wide model known as MAMS (Maquette for MDG Simulations), that incorporates a module specifying the main determinants of MDG achievement and the direct impact of enhanced public expenditure on MDG-related infrastructure and services. It considers specific targets for poverty reduction (MDG1), achieving universal primary education (MDG2), reducing under-5 and maternal mortality (MDG4 and MDG5) and increasing access to safe water and basic sanitation (MDG7). The methodological framework also includes sector-level costing estimations and a micro-simulation approach to gauge impacts on poverty and inequality of simulated scenarios.

¹⁴ "Interdependence of demographic and socio-economic processes in the Kyrgyz Republic: old challenges or new opportunities?", UNFPA, UNDP, Bishkek. 2010



Remittances from labour migrants

According to data from the National Bank of the Republic of Kyrgyzstan, the volume of remittances has increased in the past few years (see Figure 7), which indicates that more families are relying on income from labour migrants.

The change in the level of poverty with and without remittances is shown in Figure 8. The contribution to household incomes from remittances enabled the alleviation of poverty as much as 8-10 percentage points across the country during 2008-11.

Social protection systems

The social policy of the state in the context of budgetary constraints and the increase in the deficit of the state budget and budget of Social Fund failed to fulfilling social obligations guaranteed by the state. During the period from 2009 to 2012, expenditures on social security for low-income population groups rose from 9.5 to 16.3 percent of gross expenditure. The total ratio of public support of social services was 47 percent in 2012, an increase of 6 percentage points compared with 2008. Thus, it can be concluded that the state budget remains very socially-oriented.

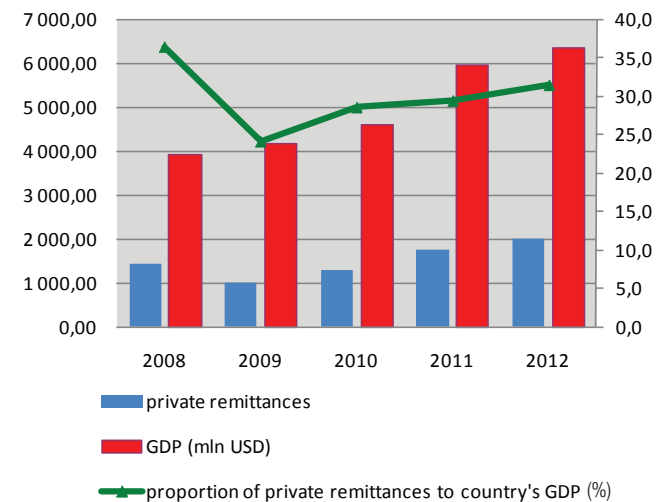
In December 2011, the government adopted the Strategy for Social Protection of population in Kyrgyzstan for 2012-2014, which recognised the social protection of vulnerable groups as a main priority of the state. The strategy aims to improve the quality of social protection in the country, define the government's vision, develop objectives and identify key actors of the social protection system.

The growth in public expenditure on social security was characterised by a substantial increase in untargeted programme funding; privileges, compensation and unified social benefits. The cost of benefits increased by 1.7 times in 2010 (compared to 2009) and the cost of privileges and compensation by 2.3 times over the same period.

The monetization of the majority benefits was completed in 2010 and the number of benefits reduced from 40 to 13. The number of recipients also decreased from 283,000 to 226,000. However, the future of reform of the benefits system is unclear¹⁵.

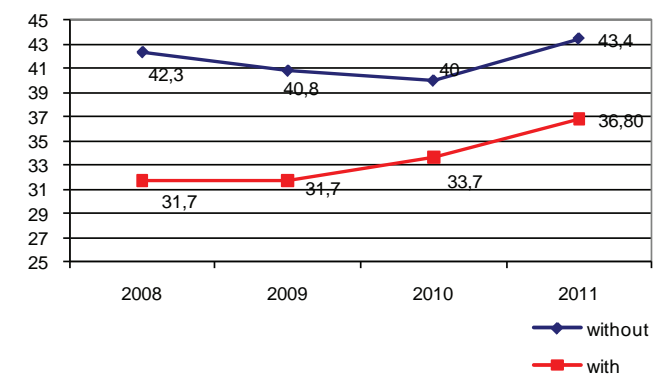
Despite increases in the minimum guaranteed income (MGI) and in the average monthly benefit for low-income families (MBLIF) the former remains low (in 2010 it did not exceed 17.8 percent of the extreme poverty line) and the latter fails to provide adequate support to low-income families. For example, pensions, due to the larger amounts involved, are more effective in reducing poverty among the

Figure 7. Remittances from labour migrants (in % to GDP)



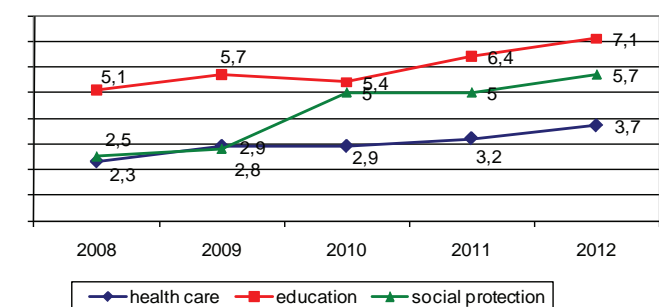
Source: National Bank of the Kyrgyz Republic

Figure 8. Changes in poverty levels



Source: National Statistical Committee of the the Kyrgyz Republic

Figure 9. Social expenditure as a proportion of GDP



Source: National Statistical Committee of the the Kyrgyz Republic

elderly and their families. Regarding monthly social benefits, they are paid on a categorical basis with a specific focus on disabled, who are not eligible for a pension (people with disabilities, children, survivors and the elderly). Providing these individuals with monthly

15 The Strategy for Development of Social Protection for the Population of the Kyrgyz Republic for 2012-2014 does not consider in full the principles of reforming of categorical benefits



social benefits is guaranteed by Article 53 of the Constitution of the Kyrgyz Republic (citizens are guaranteed social security in old age, sickness, disability and widowhood).

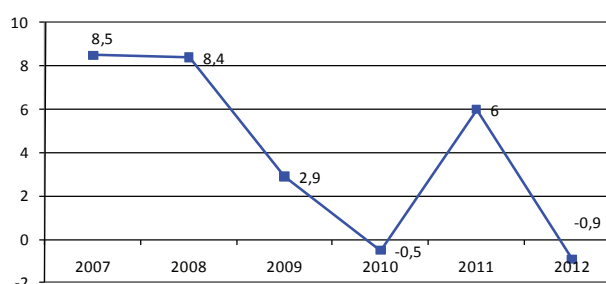
In general, as gross expenditure in the social sector is high at this stage, full coverage of the cost of living of those in need through benefits is not achievable. It is necessary to ensure that expenditure on education, health care and other critical components of the social security system are maintained at the current level of GDP percentage and to provide greater efficiency and effectiveness in public expenditure.

Economic growth

The global financial crisis of 2008 and the political events of 2010 had a major impact on the country's economy, including: a slowdown in economic growth (and recession), a decline in exports, capital outflows and rising interest rates. In terms of the impact on poverty, the most significant factors were the reduction in the rate of growth of GDP and the rise in inflation. Moreover, the rise in prices of basic food items increased poverty directly and created a serious threat of food insecurity. Figure 10 shows the trend of real GDP growth rate during 2007-2012.

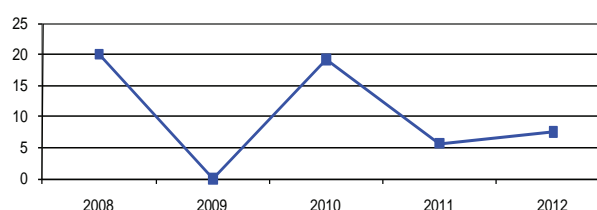
At this stage the key focus for Kyrgyzstan was to overcome the "failure" of the economy in the midst of the global financial crisis, the internal political events in April and June 2010 and the most serious man-made disaster at the Kumtor gold mining site. The cumulative rate of real growth for 2009-2012 was 7.6 percent. This period was characterised by inflation volatility (see Figure 11) that at times reached 20 percent, as a result of: (i) volatility of global food prices;

Figure 10. GDP dynamics (2007-2012)



Source: National Statistical Committee of the the Kyrgyz Republic

Figure 11. Consumer Price Index in Kyrgyzstan (in % on December 2012)



Source: National Statistical Committee of the the Kyrgyz Republic

(ii) dependence of domestic bread product market on grain and flour imports; (iii) growth of global prices for crude oil and petroleum products due to the deterioration of the political situation in the Middle East and North Africa; and (iv) growth of the money supply caused by considerable budget expenses, including a rise in the wages of social sector employees by 2.5 times (although this remains around two times lower than that of public service employees).

Box 4. Impact of the global financial crisis on the price of flour in Kyrgyzstan

The most significant increase in the price of wheat flour was reported in 2007 (reflecting the impact of the global financial crisis), 2010 and 2012 (reflecting an increase in export prices of wheat in Kazakhstan and Russia). The fragile global economy and volatile food prices continue to pose a threat to household food security. A series of shocks including rising food prices, social and political instability and natural disasters exacerbated chronic poverty and impacted on the poor, as they rely on irregular sources of income, such as unskilled labour and income from small-scale farming¹⁶.



Source: National Statistical Committee of the the Kyrgyz Republic

16 Monitoring of social impact of food price crisis in Kyrgyzstan and Tajikistan. World Bank, 2012



Food security

The poverty level is directly linked to access to food. Basic food products that affect the level of food security in Kyrgyzstan include¹⁷: (i) bread and bakery products; (ii) potatoes; (iii) fruits and berries; (iv) vegetables and gourds; (v) sugar; (vi) vegetable oil; (vii) milk and milk products; (viii) meat and meat products; and (ix) eggs. These products make up 43.6 percent of the consumer food basket.

As a result of problems in the economy, the level of self-provision of six basic products was low in 2012: cereal products at 46.7 percent of required volume, vegetable oil at 31 percent, sugar at 12 percent, eggs at 38 percent, fruits and berries at 18 percent and meat at 37 percent.

Only three key products out of nine maintained at a high level of provision: potatoes at 106,9 percent, milk at 111,1 percent and vegetables at 114,3 percent. The low rate of food self-sufficiency has led to a dependence on imports: the proportion of imports for some major products in 2012 included: flour at 45.7 percent, meat at 26.2 percent, sugar at 85 percent and vegetable oil at 65 percent.

The volatility in global food prices, low self-provision by basic food products and import barriers created a serious threat to food security in Kyrgyzstan. In 2010, the influence of the nine key food products on the rise in consumer prices/inflation was estimated at more than 60 percent (12 percentage points out 19.2 percent of inflation rate in 2010).

Box 5. Impact of Climate Change

Food security in Kyrgyzstan is highly sensitive to climate change, as recognised by the Second National Report on Adaptation to Climate Change. Annual grain crop production decreased by 17 percent, as a result of high temperatures combined with below-average rainfall during the spring and summer months in 2012.

According to forecasts, four major trends of climate change are expected and that may affect food security in Kyrgyzstan:

1. The combination of high temperatures and reduced rainfall can lead to more intense drought and heat, which will have a devastating impact on crop production and the availability of water and pasture for livestock.
2. In the short term, it will lead to an increase in the availability of water and more intense floods. However, in the long term, melting of glaciers will lead to water shortages and drought risks.
3. Changes in seasonal precipitation, such as an increase in winter precipitation (including snowfalls) and a decrease in summer precipitation.
4. The lowlands of Kyrgyzstan can potentially become arid deserts in the long term, due to the reduction of the ice flow. Changing the landscape of the country will have significant implications for the livelihoods of vulnerable populations, and may mean that some households will be forced to change their traditional way of life to adapt to new emerging landscapes.

17 Decree of the Government of the Republic of Kyrgyzstan as of 3 March 2009, No. 138)



2. Bottlenecks and risks in achieving the Goal

Poverty

Chronic poverty and lack of development in general, the economic situation and employment opportunities inhibit the establishment of productive and resilient livelihoods that would ensure sustainable food security, especially in rural areas. Political instability and frequent changes of government are often obstacles to implementation of necessary programmes.

Social and ethnic instability remains, particularly, in the south of the country. This instability has an effect on the lack of development and hinders economic progress in communities, regions and in the country as a whole. An ethnic conflict or the threat of it prevents households from establishing stable and productive means of subsistence. Donor funds and foreign investments in the country (or from other development agencies, donor countries or commercial interests) are not sufficient to achieve the MDGs. The remote and dispersed nature of the rural population also hampers the comprehensive and uniform implementation of public policy and assistance.

A major barrier to poverty reduction is the volatility in economic growth¹⁸. The situation has become particularly urgent over the past two years, when the volatility of economic growth was influenced by domestic political and socio-economic factors associated with the vulnerability of the structure of the economy, dependence on external demand, and a continuing low share of investment and worsening environment for foreign investors.

The economic situation in 2012 more clearly demonstrates the unsustainable economic growth due to structural vulnerability and dependence on internal factors, such as the dynamics of raw materials production. According to experts, Kyrgyzstan needs to take measures to diversify domestic production, export orientation, improve the economy's competitiveness and labour productivity growth.

A major barrier to poverty reduction is the labour market, which is characterised by gaps in indicators of overall unemployment and officially registered unemployment, higher levels of female unemployment, modest employment growth in small and medium-sized businesses, persistent gender disparities in wage levels and an inadequate number of jobs being created. Employment opportunities for the unemployed are limited and the vocational education system is unable to deliver high quality trainings.

According to the World Bank estimates, people in the category of extreme poverty are less dependent on income from employment and more so on pensions and social benefits, in contrast to those in the categories of poor and non-poor, and this reinforces the importance of the system of social assistance for poverty reduction¹⁹.

Vulnerable groups

Insufficient social protection for the most vulnerable groups – such as persons with disabilities – remain a major problem. According to official statistics, there are 133,000 people with disabilities in Kyrgyzstan (almost 2.2 percent of the population). Kyrgyzstan joined the Convention on the Rights of Persons with Disabilities in 2011, however the bill to introduce appropriate legislation was not enacted by Parliament and much remains to be done to institutionalise national commitment to creating a suitable environment for the disabled. Disabled people have many specific needs and their lives are characterised by high unemployment, inadequate health care and barriers to life-long learning, culture, sport and recreation. Services to address the challenges faced are limited and in some parts of the country do not exist at all. Disabled people, for example the visually impaired, have been discriminated against through having no access to an appropriate physical infrastructure and sources of information adapted to their specific needs. Approximately 90 percent of disabled people are unemployed.

Women with disabilities – approximately 50 percent of the total number of disabled persons – are the most marginalised group, as their situation is aggravated by factors such as their status as women and socially vulnerable position, as well as being people with disabilities. Disabled women and girls suffer from discrimination, violence, extreme poverty and poor health services. In rural areas the situation is worse, there is very limited access to education, information and jobs.

Food security

Food insecurity is a serious problem in Kyrgyzstan, especially in rural areas and long-term improvements will not be achieved unless the following core issues are addressed:

18 Second MDG Progress Report in the Republic of Kyrgyzstan. Bishkek. 2009

19 The Republic of Kyrgyzstan: Profile and dynamics of poverty and inequality, 2009. Bishkek 2011. Department of Poverty Reduction and Economic Management. Europe and Central Asia. The World Bank



Box 6. 'Food for Work' programme

The 'Food for Work' programme offers vulnerable households temporary employment, including in the reconstruction and rehabilitation of infrastructure, disaster prevention, environmental protection and peace-building, in exchange for a ration of fortified food for the work performed. In addition to obtaining the ration, participants and their families benefit from improved and more sustainable infrastructure that will ensure sustainable improvement in the food security situation and will allow participants to save money received from other sources.

Access to resources

A majority of farmers have very small land plots. As food availability and consumption among households with low food security status are directly linked to the size of land plots and agricultural investment, this is a major challenge for Kyrgyzstan. Food production itself is also a challenge to farmers, due to the high cost of seeds, fertilizers and agricultural inputs²⁰. Existing farming and cultivation structure does not allow for minimisation of agricultural production costs.

Access to food

The share of households' expenditure allocated for food, together with irregular, low-paid employment, limited access to land and lack of awareness of healthy nutrition practices, directly contribute to the food insecurity. Since 2010, households with a low food security status have spent 61 percent of their budget on food purchases and high food prices have been identified by these households (79 percent) as the main problem they face.

Inefficient institutional mechanisms to address food security

Effective monitoring of the food security situation is not currently in place. The provisions of the Law on 'Food Security' and the Law 'On the fortification of baking flour' are not fully considered during budgeting cycles, resulting in the need to finance the fortification of flour and procurement from state material reserves.

The Food Security Council, the highest advisory body of the government, operates with limited efficiency, while the current institutional mechanism for food security and nutrition control are not paid sufficient attention. The public school feeding programme is designed to provide food for children during school time, however, the programme lacks clear goals, management strategies and principles. The programme is not cost-effective and the additionally provided food products have low nutritional value.

Box 7. School feeding programme

Since 2006, the government has supported a programme on nutrition in primary schools (at the rate of 7-10 Soms per child per day) with a budget of US\$10 million on average per annum. The school feeding programme provides children with milk or tea and a bun and candies or other sweets. Despite the programme requiring further improvement, including in its nutrition value, it has had a positive impact on vulnerable households that are unable to provide sufficient nutrition for their children. Some of the families involved have recognised that they can send their children to school so that they can get adequate amounts of food, that they cannot get at home. Additional efforts are required to optimise the programme at the political level, to improve value chains and provide children in pilot schools with more nutritious food, through a better use of resources allocated by the state budget.

²⁰ Thirty percent of respondents under the food security assessment conducted by WFP mentioned the high cost of agricultural inputs as their main constraint. September, 2012



3. Lessons learned

Kyrgyzstan has already exceeded its MDG target for reducing extreme poverty. However, despite significant progress this achievement does not reflect the multifaceted character of poverty in Kyrgyzstan, or the country's main sustainable development challenges. Progress often bypasses those in the most precarious economic position, or disadvantaged due to their gender, age, disability or ethnicity. The further deterioration in the position of low-income regions is further proof that inequality and social exclusion are widening. The current economic growth levels are not providing enough adequate work opportunities, resulting in widespread unemployment, particularly among many young people, the disabled, and people without adequate skills and knowledge. Moreover, as energy, clean water and land become increasingly scarce, vulnerable communities are being left further behind. Labour-intensive sectors are not well developed and do not bring socio-economic benefits to the poor. The agricultural sector has low productivity. The financial sector has not been able to deliver effective lending schemes and microfinance resources are too expensive. The social sectors, especially health and education, have failed to meet market requirements and create market incentives for the growth of wages. Trade has become vulnerable to external shocks and prospects for its further growth are low.

Since the early 1990s, the international community has aspired to integrate the social, economic, and environmental dimensions of sustainability, but Kyrgyzstan has yet not achieved this. Sustainable development is a broad development agenda that focuses on change to transform impoverished people, communities and countries into informed, educated, healthy and productive societies. Sustainable development can also help wealth creation that generates equality and opportunity. Ignoring the core principles of sustainable development may seriously undermine the progress that has been achieved so far.

The threat of climate change and environmental degradation aggravate economic challenges and pose unprecedented threats to humanity: they should be fully taken into account when designing coping mechanisms and policies. Previous MDG analysis in 2010 focused on the expected negative impact of climate change, primarily on agriculture. The government demonstrated its commitment to sustainable development through adoption of a number of strategic documents, but has yet to institutionalise specific climate change adaptation mechanisms.

The threat of malnutrition and food insecurity have been underestimated with little attention paid to addressing them. Kyrgyzstan lacks a specific national methodology for estimating the numbers and dynamics of the undernourished.

4. Recommendations

Situational analysis of poverty trends and malnutrition issues indicates that a significant number of problems have accumulated that will not be resolved by 2015. However, in the medium-term, a number of measures will enable improvements, providing a basis for longer-term positive trends.

Medium-term measures (until 2015)

Policies to promote economic growth

The government must strengthen its commitment in the area of general poverty reduction through a range of measures to improve social protection and promote the empowerment of vulnerable groups to increase their income through improved access to employment, finance, information, etc. Moreover, there should be adherence to the intended targets of macroeconomic parameters

and poverty reduction identified in the National Sustainable Development Strategy of the Kyrgyz Republic for 2013-2017, under which a reduction of general poverty from 37 to 25 percent of the population is expected by 2017.

The government should take into account the impact of economic growth and human capital growth on poverty. As expert calculations show, the levels of poverty reflect the economic changes, including that of rising GDP. Furthermore, the higher the economic growth and the expenditure on education, the lower the levels of poverty are²¹. In this respect, accomplishing the targets to achieve average annual economic growth of at least 7 percent per annum may help to reduce poverty. In dealing with poverty reduction issues, account should also be taken of the importance of ensuring price stability, as the high density of the poor population living near the poverty

21 R. Mogilevski. Assessment of development strategies aimed at achieving the MDGs in Asia. A macroeconomic analysis of the Strategy for achieving MDGs in the Kyrgyz Republic, Bishkek. 2011



line makes rising prices a sensitive issue. The NSC estimates that the likelihood of poverty increasing is greater when inflation rises, and is not accompanied by improvements in well-being

The public regulatory policy aims to develop and implement a system of incentives for local self-governments and business entities that promote economic development, attract investments and create job opportunities. Considering that one of the main sources of economic growth are small and medium-sized enterprises (SMEs), the development of which significantly affect the dynamics of poverty, economic policies that improve the business environment are important. It is necessary to develop a strategy/ programme for the development of SMEs, which should include special measures to support start-up entrepreneurs, as well as women and young people in accessing finance, information and training.

Educational programmes should be launched for illiterate adults, especially among rural women and adolescents who do not attend school; and develop and implement programmes to improve the financial literacy of the population.

Improving social security policies

Efforts must continue on improving targeted social assistance, annually increasing benefits for low-income families with children and improving the mechanisms of social certification.

The implementation of measures to support people with disabilities (PWDs) should continue, with the participation of donors. Measures will include preparation for the ratification of the UN Convention on the Rights of the Disabled, expansion of the scope and improvement in the quality of services provided to PWDs through the introduction of minimum social standards, raising the level of social benefits and expansion of the range of alternative types of social assistance. The PWD also require more work on socialization and integration in society, including measures to ensure access to the physical infrastructure, education services (distance education programmes; inclusive forms of education at all levels, promotion of facilitated access to vocational training, etc), create opportunities and promote employment (through the use of the mechanism of social partnership and social orders) and integrate culturally (introduction of sign language on national television channels, information campaigning, preparation and placement of commercials on PWD-related issues, expansion of local centres and programmes providing consultations and protecting the rights and interests of PWDs).

Mechanisms for the accountability of local authorities and partners on the reduction of poor and extremely poor population

are also required.

Reducing malnutrition and improving food security

Regulatory stocks of food supplies can be provided in the state material reserve to support low-income households in critical situations and carry out interventions aimed at securing food supplies in the event of a sharp rise in food prices.

The school nutrition programme must be expanded to improve the quality, effectiveness and sustainability of the State program of nutrition among primary schools.

Reform of the public administration system is needed, reinforcing its control and supervisory functions over the quality of food.

The existing institutional mechanism for food security and nutrition regulation should ensure timely interaction among agencies, together with the incorporation of food security-related issues in the activities of key ministries and agencies. A national methodology for estimating the number of undernourished people is needed as a basis for policy formulation.

National analytical capacity in the field of food security requires strengthening, specifically in forecasting and responding to food security situations.

Close cooperation is needed with local partners – given the remoteness and dispersion of the rural population – who can make significant contributions at the early stages of intervention planning and provide access to remote communities to both monitor the situation and take response measures. Thus, food security situations must be addressed in parallel with other efforts, such as the development of rural transport infrastructure, as well as the improvement of data collection systems and possibilities to use mobile devices to collect and store data for the national and local authorities.

Reform of the management system in the agricultural sector is needed to enhance food self-sufficiency of the population and reduce dependency on food imports.

Long-term measures (after 2015)

The National Strategy for Sustainable Development anticipates a 25 percent poverty reduction by 2017. Therefore, it is feasible to reserve this indicator to track progress for the period after 2015 as well.

A set of special indicators from the Government NSSD Implementation Programme can be recommended for measuring changes in the quality of life of each category of citizens, including:



- The proportion of the undernourished population²², (%)
- Preschool education coverage (%)
- The share of adolescents not attending school in the total volume of students aged 7-14 years (%)
- The proportion of the population with access to clean drinking water (%)
- The rate of unemployment among young people (%)
- Social services coverage for persons with disabilities and the elderly without care (%).

Proposals by environmental-economic indicators:

- agricultural activities through an expansion of organic technologies;
- energy as a low-carbon industry, with an expansion of energy production from non-conventional sources;
- manufacturing industry through resource-saving technologies;
- energy-efficient construction;
- mining development, subject to minimized impact on the environment and the health of the population;
- tourism development, with minimum environmental pollution.

The Government of the Kyrgyz Republic could adopt country-specific indicators reflecting the quality of its public administration, as this is a cross-cutting priority both in the National Strategy and the Programme of the government. A formulation of long-term indicators can be proposed so as to reflect the requirements for the key components of public administration:

- (i) level of efficiency of the State governance institutions;
- (ii) legislation;
- (iii) human resources capacity;
- (iv) availability and transparency of information.

None of the above measures will lose their relevance after 2015, but the emphasis in these policies may have changed. Economic policy should focus on the development and implementation of a long-term programme on adaptation to climate change for the agricultural sector. The programme should be directed towards the introduction of new cropping and livestock production technologies in agriculture that are climate-change tolerant and accompanied by measures aimed at creating new mechanisms that take account of climate change (e.g. risk insurance). Clear-cut and transparent mechanisms of State support, such as incentive and awareness

22 Food consumption below the minimum physiological rates, long-term





GOAL 2.

ACHIEVEMENT OF UNIVERSAL
SECONDARY EDUCATION

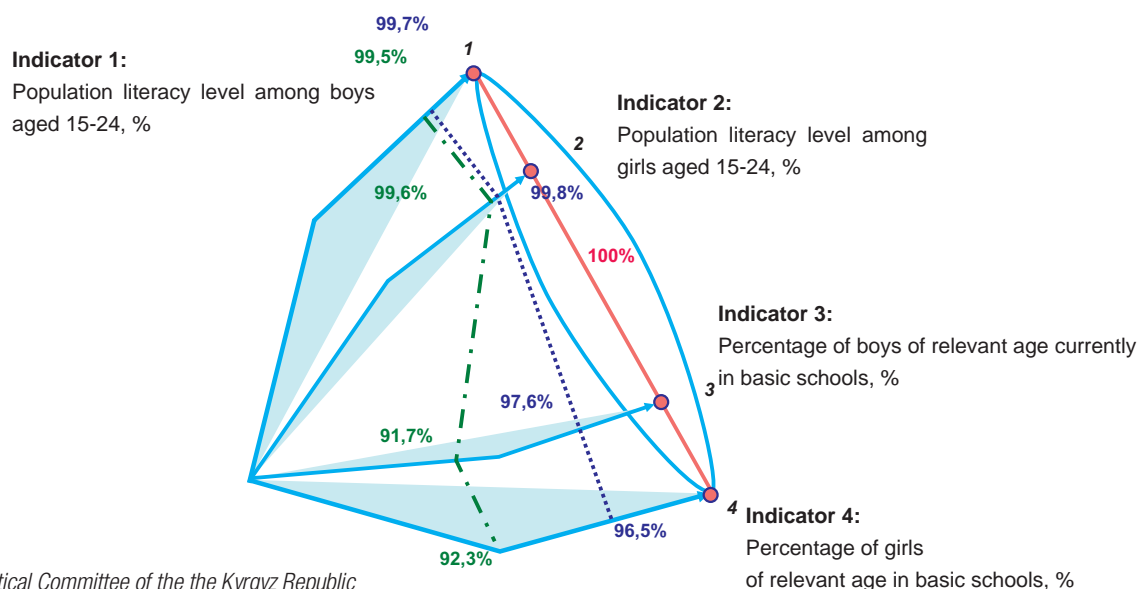


Goal 2. Achievement of universal secondary education

TARGETS

ensure that boys and girls alike will be able to complete basic secondary schooling

Figure 12. Progress towards MDG 2 target indicators



Source: National Statistical Committee of the Kyrgyz Republic

1. Current situation and trends

Over recent decades the education system in the Kyrgyz Republic has undergone significant challenges. Despite positive changes in terms of improvement of the curriculum through diversification of the educational institutions and programmes, increased share of private education institutions and diversification of funding sources, the quality of indicators have deteriorated significantly.

The education sector is regulated by a number of documents, including the Constitution of the Kyrgyz Republic, the Law on Education, the Law on the Status of Teachers, the Children's Code of the

Kyrgyz Republic, the Strategy on Development of the Educational Sector in the Kyrgyz Republic for 2012-2020 and its Actions Plan and the National Strategy of Sustainable Development of the Kyrgyz Republic for the period of 2013-2017.

Achieving the MDGs and ensuring access to high-quality primary, secondary, and vocational education are the main priorities of the Strategy on Development of the Educational Sector in the Kyrgyz Republic for 2012-2020.

Box 8. The impact of the global financial crisis of 2008 on the achievement of the MDG2

The global economic crisis in 2008 had a negative impact on secondary education indicators:

- **Coverage.** A decrease in family income during the crisis increases poverty, leading to withdrawal of children from the school. Children of primary school age do not attend as parents are unable to provide clothing and school supplies, while children of secondary school age do not attend due to the need to begin working activities. Furthermore, the increase in labour migration during the crisis and the commercialisation of the education sector also led to a withdrawal of children from the educational process.
- **Education quality.** The economic crisis, accompanied by a reduction in government expenditure (including for education), led to the deterioration of quality in the educational environment, among teaching staff and information support for the educational process.

The indicator 'literacy level of population at the age of 15-24' in the short-term period is not sensitive to the factors related to the economic crisis. The indicator 'coverage of children by the basic education (grades 1-9) of the relevant age' is more sensitive to the crisis.



There were 2,204 educational institutions operated in Kyrgyzstan during 2011-2012, providing access to education for 1, 015,000 students. During 2000-2005 the number of students enrolled in education was 1,150,000.

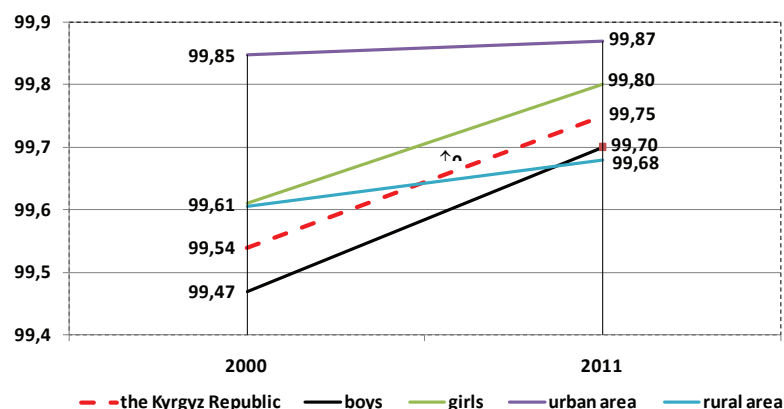
For the period of 2000-2011 the level of literacy rate of population at the age from 15 to 24 has been kept at high level (99 percent) and has clear tendency to grow. In Bishkek city the literacy level was 99.95 percent and in Naryn oblast it was 99.46 percent.

In general, the situation is stable although a slight gender and territorial imbalance remains.

The proportion of children from 7 to 15 receiving basic education (1-9 grades) increased by 1.6 percentage points to reach 97.1 percent. Coverage in cities is creased by 12.8 percentage points to reach 109.5 percent, while this indicator decreased in rural areas. It became evident in the 2000s that there were increasing migration flows from rural to urban areas. Low coverage of children by basic education in rural areas can also be explained by external migration as there is an assumption that children moved to study in host countries, such as Kazakhstan and Russia. There is a steady trend among the wealthier segments of the population residing on the periphery of cities to send their children to study in cities with the purpose of graduation in higher educational institutions. In all cases mentioned above, children remain registered at the place of their parents' residence, which distorts the formal statistics.

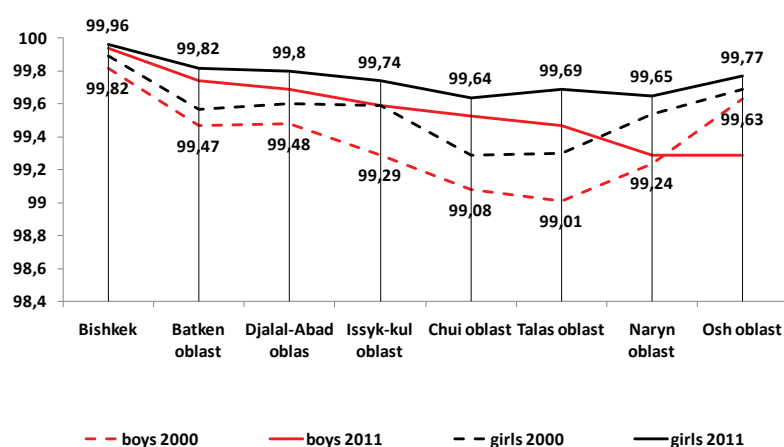
The regional breakdown shows a decrease in the provinces with high level of labor migration from Osh, Jalal-Abad and Batken, and an increase in the cities of Osh and Bishkek and in Chui oblast. The coverage of girls receiving basic secondary education in Jalal-Abad oblast reached its highest point of 98.6 percent in 2005 and subsequently decreased to 94.3 percent in 2011. Between 2005 and 2010 the percentage of boys in Osh province increased by 5 percent but then dropped in 2011 to a level below that of 2000. The proportion of girls attending secondary school in Osh province declined from 96.4 percent to 89.1 percent during the period from 2000 to 2011. The practice of early marriage that exists in the southern part of the

Figure 13. Youth literacy rate for 15-24 year-olds (%)



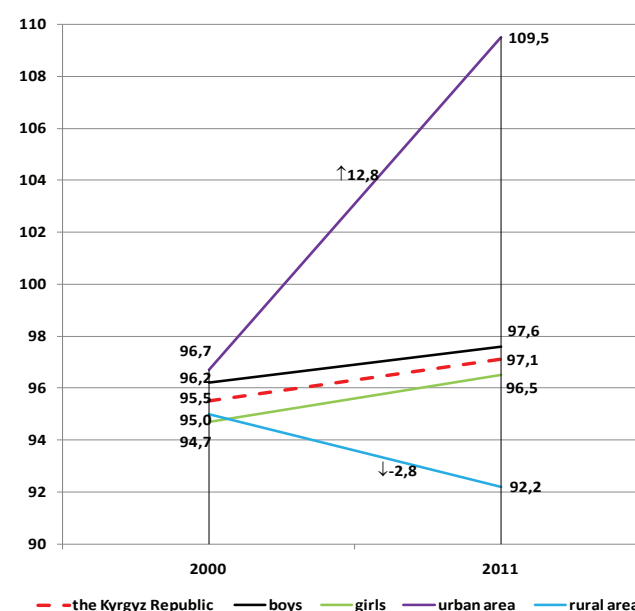
Source: National Statistical Committee of the Kyrgyz Republic, MDG Database

Figure 14. Literacy level among young people aged 15-24 years, by region and gender (%)



Source: National Statistical Committee of the Kyrgyz Republic, MDG Database

Figure 15. Proportion of children receiving basic education (1-9 grade) by gender and place of residence (%)



Source: Children of Kyrgyzstan. Statistical digest. UNICEF, 2012

country is a possible explanation. After the events in 2010 on the South the parents in the villages affected by inter-ethnic clashes forced early termination of education. High school drop-outs have been heavily affected by the ethnic conflict in 2010, when parents preferred to suspend the education of girls. In Naryn and Talas the proportion of girls covered by basic education also decreased, due to parents' poverty and unemployment, together with the remote location of schools.

The proportion of children attending school at each educational-age level varies. The highest coverage is observed in primary school (grades 1-4), which has grown since 2000 and exceeds 100 percent due to the different ages of children enrolling in school. The proportion of children attending school in the secondary schools (grades 5-9) is decreasing, largely due to poverty, lack of parental responsibility and early engagement into labour activities for the purpose of earning money. Traditionally after completion of middle school the number of children continuing their education sharply decreases. Some school graduates continue their education in the vocational education system and secondary technical institutions. Girls in rural areas in the south of Kyrgyzstan are often married at early age and therefore are forced to terminate their education. During the reporting period, the coverage of school students involved in secondary education (grades 10-11) increased by 5 percent (these are children who, on the initiative of their parents, are focused on obtaining a higher education. The number of girls is approximately 7 percent higher than that of boys).

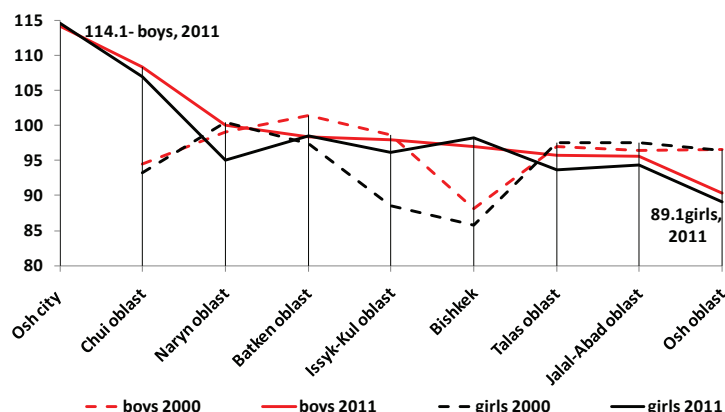
The Educational Development Strategy of the Kyrgyz Republic for 2012-2020 identifies the following key challenges in the sector²³:

Based on demographic projections the construction of 420 schools are required for an additional 102,400 students²⁴.

There are 351 schools that require immediate renovation of roofing, electrical systems, water supply and heating systems (due to outdated boilers and heating equipment).

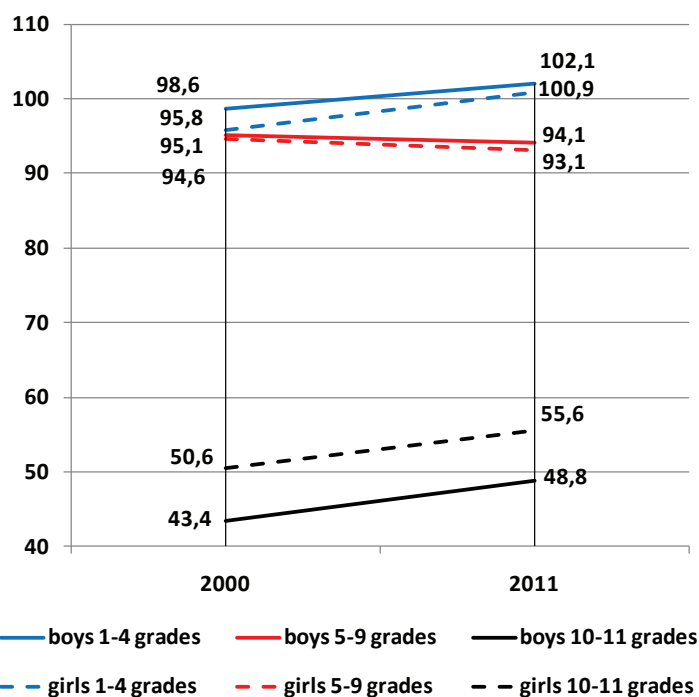
Existing schools and those under construction require school furniture including: 46,000 sets of school desks,

Figure 16. Proportion of children receiving basic education (1-9 grades) by region (%)



Source: Children of Kyrgyzstan. Statistical digest. UNICEF, 2012

Figure 17. Coverage rate in the primary, general and secondary educational institutions, by relevant age groups (%)



Source: Children of Kyrgyzstan. Statistical digest. UNICEF, 2012

7,000 bookstands, 6,000 teachers' desks, 17,000 teachers' chairs and 6,000 blackboards.

An evaluation of 3,028 schools and pre-school institutions in 2012 identified 89 percent of 5,583 buildings that did not meet seismic standards and require either reconstruction and overhaul or demolition and rebuilding.

23 Data of 2010- 2012

24 Calculations are based on demographic forecasts and the necessity to meet requirements on the maximum number per class: no more than 30 school students per class

According to official data, the shortage of teachers amounts to 4.2 percent, but the reality is much higher.

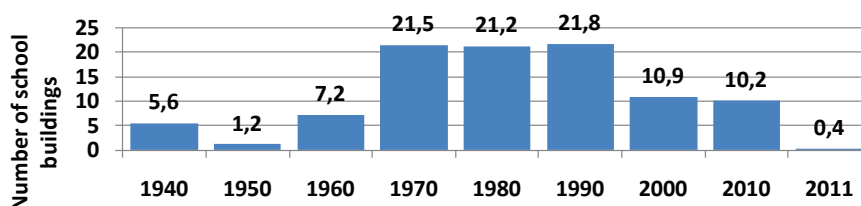
- Only one-fifth of graduates with pedagogical speciality become teachers. Of those graduates who begin working in schools, around 20 percent leave within the first year²⁵.
- There are approximately 60 percent of school teachers at retirement and pre-retirement age²⁶. There are some schools in the regions, where 100 percent of teachers are the pensioners.
- The availability of books is only 72 percent of the required quantity. Many new schoolbooks are unclaimed by teachers due to their complexity and lack of guidance materials. Furthermore, the low quality of textbooks (paper quality and unsatisfactory binding) causes rapid ageing and a limited lifetime.

- A lack of funding for the educational sector results in demands for financial support from parents. In 2011, parents financed over 8 percent of school expenses²⁷.
- The problem of school attendance among children aged between 7 to 15 years remains.

The main reasons of school drop-outs are²⁸:

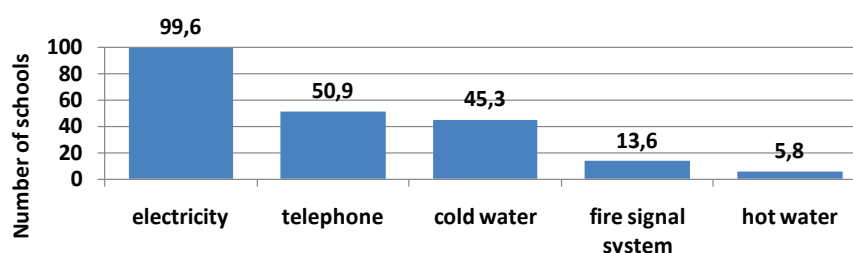
- Financial difficulties in families;
- Increase of expenses to educate a child at school;
- Decline in the prestige of education among some adults;
- Increases in social abandonment;
- Unwillingness of some adolescents to study;
- Closure of boarding schools;
- Failure in bringing children to school from remote areas.

Figure 18. School buildings per construction periods (% of total number of schools)



Source: Education and Science in the Kyrgyz Republic. Statistical digest. Bishkek 2012

Figure 19. Provision of schools with public utility services (% of total number of schools)



Source: Education and Science in the Kyrgyz Republic. Statistical digest. Bishkek 2012

25 http://www.open.kg/ru/theme/analit/?theme_id=163&id=640

26 In schools located in high-mountain areas the retirement age begins at 45 years

27 <http://www.edu.gov.kg/ru/presscentr/novosti/490.html>

28 Education and Science in the Republic of Kyrgyzstan. Statistical Digest, 2012

Box 9. The impact of climate change on the achievement of the MDG 2

The direct negative impact of natural disasters on the provision of basic secondary education includes the destruction of school infrastructure. According to the data to the Ministry for Emergencies of the Kyrgyz Republic there were 143 natural disasters within an eight month period in 2011, resulting in 70 educational institutions being damaged. In July 2011, following an earthquake in the south of the country, 64 schools were damaged and 14 were completely destroyed. School students had to study tents until the end of October 2011.

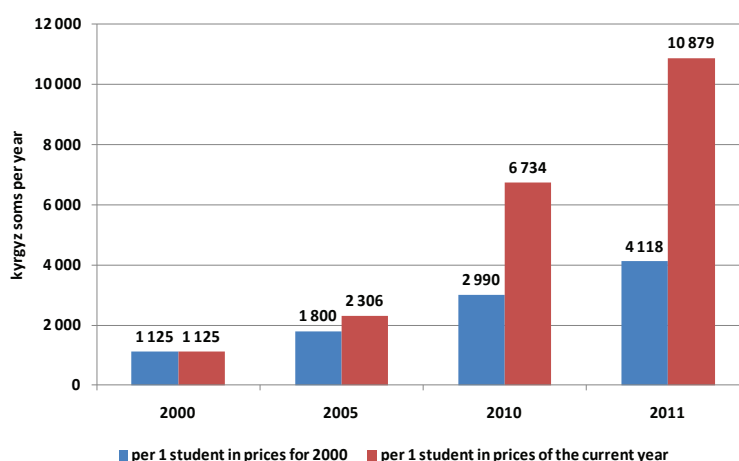
Climate change will have an indirect negative effect on the provision of basic secondary education, in terms of the associated increase in poverty. This process may lead to an increase in the number of children who are forced to start to work at early age, resulting in a decrease in the involvement of children in basic education³¹.

Budget expenditures for the educational sector

During 2000-2012, the proportion of budget expenditure of total state budget on education varied from 18.6 percent of total state budget in 2010 to 25.6 percent in 2007. The global economic crisis and political developments in Kyrgyzstan in 2010 resulted in a significant decline in real budget expenditure for the education sector. For instance in 2010 the state budget expenditures for education were less than in the previous three years but increased in 2011 by 25 percent compared to 2010.

The largest share of the state budget for education – over 50 percent – was allocated for secondary education. The highest rate of secondary education expenditure occurred in 2011, resulting from an increase in teachers' salaries. Over the period 2000-2011, expenditure per secondary school student increased by 3.7 percent. Despite state budget allocations for education being kept at a reasonable level, the utilisation of funds remains at a low level of efficiency. According to available data, the absolute increase in educational expenses in Kyrgyzstan still does not cover the increase of expenses of educational organizations for upgrading school libraries, educational and computer equipment, development of educational technology and infrastructure, as the expenses for these purposes cover only 14 percent, the remaining 86 percent are assigned for salaries, the Social Fund, utilities, food, etc.

Figure 20. Annual state budget expenses for each secondary school student



Source: *Children of Kyrgyzstan. Statistical digest. UNICEF, 2012*

To address the challenges described, by the end of 2013 the education sector will complete a transition to a new model of school funding. The new model of funding will be based on a per capita principle³⁰ previously tested in 2007 within Yssyk-Ata rayon of Chui oblast. At the time of the preparation of the report, 717 schools (one-in-three school in the country) had switched to the new funding model. The new approach establishes one common rate of funding per student across the country at each level of education. For this purpose, the minimum standards of budget financing (MSBF)²⁹ of educational institutions in Kyrgyzstan were developed³¹. The model allows schools to maintain financial and administrative autonomy and helps to systematise paid and free services in the system of school education.

29 The Kyrgyz Republic. The Second Progress Report on the Millennium Development Goals. Bishkek. 2010

30 Decree of the Government of the Kyrgyz Republic № 694, as of 27 September 2006

31 Decree of the Government of the Kyrgyz Republic N 146 'On the minimum standards of budget funding to the educational institutions of the Kyrgyz Republic' as of 14 April 2008. Government Decree № 563, 'Methods for determining the standards of budget funding to the educational organizations of the Kyrgyz Republic'

Table 2. Ratio of the school education budget funding and Real needs for 2010, by region, in accordance with minimum standards of budget financing (MSBF)

Oblasts	MSBF % Coverage
Bishkek citytt	118
Osh city	95
Chuy oblast	94
Naryn oblast	87
Issyk-Kul oblast	86
Talas oblast	85
Batken oblast	78
Osh oblast	75
Jalal-Abad oblast	73

Source: based on the round table materials 'Guidelines for transition of schools on a per capita funding mechanism', Ministry of Education and Science of the Kyrgyz Republic, 19 April 2011

The need for transition to the new financing model was confirmed in 2010 through regional comparison of the volume of required and available financing. The analysis revealed that other than Bishkek City, all oblasts were underfunded. The worst situation was reported in Djalal-Abad oblast and other oblasts located in the south of the country.

Efficiency of budget expenditures for the education

In 2006 and 2009, Kyrgyzstan took part in an international comparative study on the functional literacy of 15-year-old school students (Programme for International Student Assessment), an authoritative study of the educational quality around the world, conducted every three years by the Organization for Economic Cooperation and Development (OECD). In 2006, school students were on 57th place out of 57 and on 65th out of 65 in 2009, with an average score of 56 percent of the average score of the winner - country. Over 80 percent of Kyrgyz school students have not reached

the international minimum standards in reading, mathematics and scientific literacy, thereby indicating the problems of quality in the educational sector. The test demonstrated the direct link between the quality of basic secondary education and availability of financing.

Similar outcomes on the qualitative differences of secondary education were obtained at the regional level in 2007 and 2009, within the National Assessment of Educational Achievements (NAEA) among school students of 4th and 8th grades conducted by the Ministry of Education and Science.

The national testing outcomes (NTO) can also be applied for evaluation of secondary education quality. National testing has been conducted in Kyrgyzstan since 2002. School graduates, wanting to enroll in higher educational institutions take part in NTO.

The southern region provides the least number of school graduates participating in NTO, with approximately 40 percent. Bishkek provides the largest number of school graduates.

Table 3. National testing outcomes (NTO) outputs in 2012

	Average score ³²
Kyrgyzstan	109.4
Education in Kyrgyz	99.6
Education in Russian	127.7
Education in Uzbek	105.3
Girls	112.1
Boys	106

Source: National testing outputs and enrollment in grant and contract places of the universities of the Kyrgyz Republic in 2012 - B.: 2012

32 Maximum score is 250



Analysis of NTO average scores shows inequalities in outcomes, depending on the language of education and gender. Analysis of the NTO average scores in dynamics, showed that, within the period from 2002 to 2011, the government expenses for maintaining education quality grew (although the quality retained at the same fairly low level). In conclusion, the efficiency of government expenditure over recent years has not improved. This is due to the accumulation of funding deficiency, i.e. deterioration of the educational infrastructure and technical base is faster than the growth in funding³³, since the potential of the educational environment, remained from the Soviet period - has run out.

Reforms in the education sector during 2009-2012

1. The low level of literacy among Kyrgyzstan school children revealed in the results of the PISA study, prompted the Ministry of Education and Science to accelerate reforms in the education sector including:

- Pre-school preparation programmes for children not attending pre-school institutions was introduced, which have a positive effect on the quality of secondary education.
- The Framework National Standard of Secondary Education of the Republic of Kyrgyzstan was approved in 2009. It has strategic importance for development of the education system as it sets new standards for strengthening the competence in the education system and changing it to a 'results-oriented' system.
- Reform of the salary system for education workers was carried out in 2011.

From 2012, a phased reduction of hours in the basic curriculum was introduced, for subsequent reinvestment of the saved funds into the education system.

- Boards of Trustees were established in schools throughout the country.
- A pilot experiment on development and implementation of the per capita model of funding, based on MSBF requirements, was carried out in 2009 in the schools of Issyk-Ata rayon of Chui oblast, and disseminated within Chui, Issyk-Kul and Batken oblasts. The time schedule for transferring the educational institutions of Osh, Jalal-Abad, Naryn and Talas oblasts, together with Bishkek and Osh cities, to a per capita model of funding, was approved in 2011³⁴.

- The process of aligning expenditure per school student with the breakdown by region, was launched.
- Optimisation of the secondary schools network commenced.
- Staff shortages were reduced. In the 2011-2012 academic year, the general demand for teaching staff in Kyrgyzstan was 3,300 staff, then in the 2012-2013 academic year, after conducting salary wage formation reforms, the demand decreased to 1,439 people.
- The recruitment of 4,823 young professionals in the 2011/2012 academic year.

2. In 2011, the implementation of a two-year EU project 'Support to the education sector in the Republic of Kyrgyzstan Republic' was launched. The project is related to the introduction of the programme to 'Support to the Implementation of the Education Sector-Wide Approach (SWAp) in the education system, fundamentally changing the approach to the state education administration.

3. In 2011, a programme platform was developed and the formation of the 'Information databank of the educational institutions of the Republic of Kyrgyzstan' undertaken, for collection and analysis of information on educational institutions of all educational levels throughout the country. The creation of an educational portal within the website of the Ministry of Education and Science was launched with the support of UNICEF.

33 Or in the most optimistic case - dilapidated educational environment is being compensated by an increase in the state expenditures and the efficiency of state expenditures depends on decrease of the existing quality of education

34 In accordance with the Decree of the Government of the Republic of Kyrgyzstan № 563as of 20 November 2011 'On the transition of educational institutions of the Republic of Kyrgyzstan to the per capita funding'

2. Bottlenecks and risks in achieving the Goal

Despite the overall growth in governmental financing for education, expenses per each school student are still insufficient to create a modern educational environment.

Under the conditions of the state budget deficit there is a risk of underfunding for the sector (or in the worst-case scenario to cover the budget deficit at the expense of the school education system).

Serious errors, made in the course of the transition to the per capita model, leading to a reduction in teachers' salaries.

Lack of mechanisms for attracting funding from various public groups interested in improving the performance of educational institutions.

Lack of interest from local government bodies in optimisation of the school network, as their provision is primarily the obligation of the republican budget and the Ministry of Finance, despite the fact that they belong to the municipal property.

Lack of a management system in the education sector, based on the monitoring and control of results of the educational process.

3. Lesson learned

During the period from 2000, MDG2 was not fully achieved, thereby necessitating a review of the results of completed activities, identification of lessons learned and development of further recommendations:

Schools following the experimental approach of per capita funding demonstrated a high efficiency of functioning, however, the approach was viewed negatively among some teachers in Bishkek, caused by rough mistakes in schools of Bishkek and resulting in the reduction teachers' salaries.

The coverage of children between the ages of 7 and 15 by basic secondary education has reached 97.1 percent. However, the overall increase of the index hides multidirectional process. A key lesson learned was the absence of mechanisms to impact on the reduction of gender and regional coverage. Thus, in 2011, the enrollment of girls in Osh oblast over the period from 2000, fell to its lowest level of 89.1 percent.

The lack of a consolidated methodology for systematic registration and collection of data on children who have left or never

attended school has led to skepticism on the reliability of data (from NSC, ME&S and NGOs) concerning the number of children from vulnerable families, disabilities, and children of migrants.

Increased public expenditure on secondary education for the period 2000-2011 years has not led to improvements in the quality of education (which depends on the educational environment). During these years, not more than 14 percent of the total public expenditure was invested in secondary education. The dilapidated educational environment is associated with the unbalanced and ineffective use of increased public expenditures.

Still in relation to the funding of secondary education, the long-regional differences in the funding of secondary educational institutions have led to an imbalance in educational outcomes, related to the geographic location and language of learning.

Finally, in addition to the existing risks described in the basic secondary education system, there is a lack of monitoring and evaluation of educational institutions, which prevents a rapid response to emerging issues.

4. Recommendations

The diminishing quality of secondary education signals the need to include this as an additional item in the agenda. Thus, it is necessary to establish and institutionalize a system of monitoring and evaluating the quality of education.

Regional, urban/rural and social differences that occur in the field of education necessitate the localisation of the targets of MDGs by:

- formulating localised targets and developing localised indi-

cators that will provide information for investing in education at the local level and help to more effectively address the differences between regions and population groups.

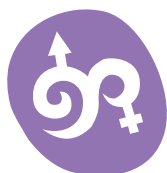
- developing a strategy for eradication of the root causes that lead to gaps in the quality of education (region/city/village, Russian/Kyrgyz/Uzbek as the languages of instruction, etc).

A policy and corresponding plan of action to address the problem of children not attending school is needed.



GOAL 3.

PROMOTE GENDER EQUALITY
AND EMPOWER WOMEN

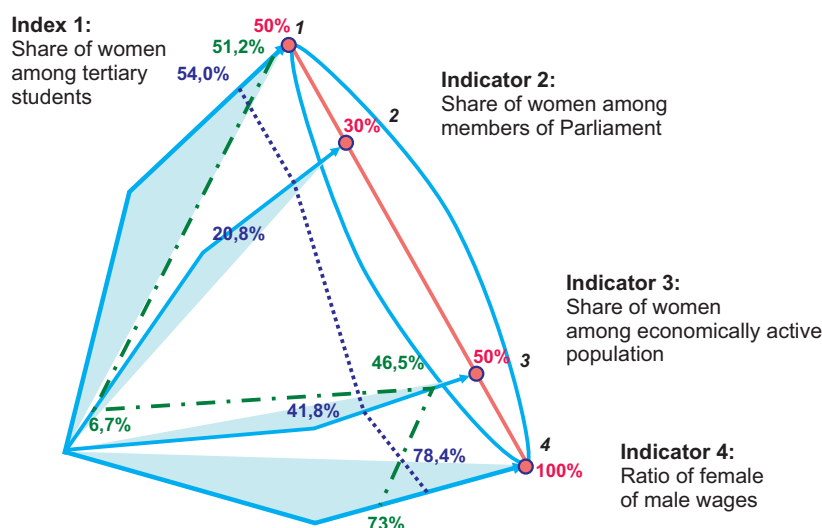


Goal 3. Promote gender equality and empower women

TARGET

eliminate gender disparities in employment and managerial opportunities

Figure 21. Progress towards MDG 3 target indicators



Source: National Statistical Committee of the Kyrgyz Republic

1. Current situation and trends

Gender equality and empowerment are obligations for Kyrgyzstan resulting from its joining a number of international conventions following independence, including the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW). Gender equality is recognised as one of the fundamental human rights and freedoms by the Constitution of the Republic of Kyrgyzstan. The basis for the gender policies' legal mechanisms is provided by a number of normative legal acts, including the Law of the Republic of Kyrgyzstan 'On State guarantees for provision of equal rights and equal opportunities for men and women' of 4 August 2008, No. 184, and 'On social and legal protection against domestic violence' of 25 March 2003, No. 62.

The first long-term national strategy for achieving gender equality by 2020 was developed and adopted in 2012, focusing on the need to strengthen the gender policy mechanisms in response to the deepening social disparities caused by the political and economic

crises of recent years. Against the background of the continuing excess number of women (54 percent) among university students, the proportion of women in the economically active population has steadily declined. There has been a noticeable narrowing of the gender wage gap resulting from raised wages in the education and health sectors in particular, although there cannot be said to be sustainable positive changes occurring. The volatility of the women-to-men wages ratio index has been conditioned by the deepening of sectoral and vertical gender segregation in the labour market³⁵.

At the decision-making level, the proportion of women remains low, despite the introduction of special measures to support women's political participation. The 30 percent representation of women in the Jogorku Kenesh (the Parliament) that was achieved in 2008 as a result of the introduction of quotas for parliamentary elections has now fallen to 20.8 percent (a more detailed analysis of these trends is presented in the next section).

³⁵ Gender segregation is the term used to explicate the labour division mechanism that is based on gender disparity and discrimination arising from the ideology of the 'natural' roles/purposes of women and men. There are several dimensions to gender segregation in the labour market:

Box 10. Gender Segregation

Gender segregation is the term used to explicate the labour division mechanism that is based on gender disparity and discrimination arising from the ideology of the 'natural' roles/purposes of women and men. There are several dimensions to gender segregation in the labour market:

1. the imbalance in gender representation by labour sectors (sectoral/horizontal segregation) and by positions held (vertical segregation);
2. disparity in the distribution of resources to various sectors of the economy/labour market, for example, paid versus unpaid domestic work;
3. disparity in occupational classification, for example, 'men's' jobs are traditionally described in more detail as compared to 'women's' activity areas which are united in broader categories that span many professions at once (e.g. 'nurturance', etc.).

Typically for gender segregation is the presence of invisible – in the absence of formal prohibitions – barriers to advancement of certain social groups, usually women, in their career ladders (the 'glass ceiling' effect) due to restricted access to jobs that provide a higher income and career development (the 'glass walls' effect). The existence of these barriers largely determines women's choosing of such professions that do not involve significant career advancements

Share of women among university students

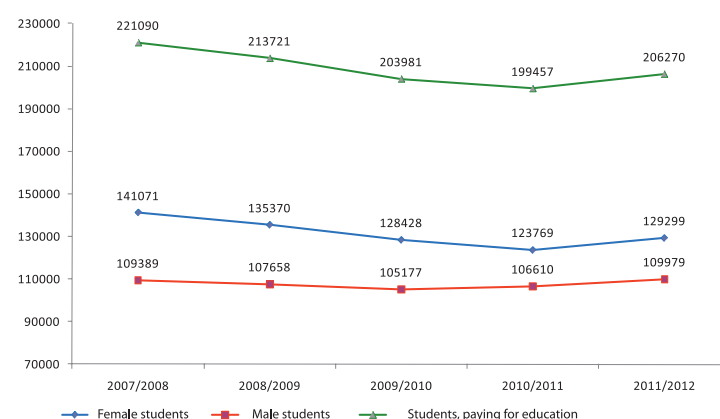
The proportion of women among university students comprises 54 percent. Regionally, the largest gap – with women accounting for more than 60 percent – is observed in Naryn oblast. However, the proportion of women among students in Chui oblast is only 37.3 percent³⁷. The likely reason for regional disparities is in the specific features of the education offered by universities and colleges. Thus, the only State University in Naryn oblast primarily offers training in humanities with a pedagogical emphasis that women tend to choose: nationwide, they represent 84 percent of university students³⁸ enrolled in courses of pedagogical studies. It is significant that the average wages gap between men and women in Naryn oblast is the smallest at 96 percent³⁹. This is due to the fact that, in this region, 'women's' employment niches have been linked primarily with public services and other budgetary structures which tend to make tertiary education in demand. In Chui oblast, institutions of higher education, Chui University in particular, have focused on teaching economics, finance and law; occupations that are in demand among men.

There has been a general reduction in the number of people entering universities: in the 2007-2008 academic year, there were 250,460 applicants, while in 2011-2012 there were 239,208 entrants⁴⁰. The decline in the number of tertiary students could have been influenced by the

increased cost of tuition⁴¹. The number of students studying on a contract basis decreased by 6.7 percent in the 2011-2012 academic year compared to 2007-2008⁴². Taking into account that the pace of decline in the number of female students in universities has been higher than that of male students (see Figure 22), it can be concluded that the increased cost of tuition has had a worse impact on women than on men. In resource-limited settings, families tend to invest in the education of their boys first and foremost.

Against the backdrop of declining numbers of tertiary students (see Figure 22), there has been an increase of more than 30 percent in the number of school graduates enrolling in educational institutions of primary and particularly of vocational education⁴³.

Figure 22. Gender composition of tertiary students



Source: National Statistical Committee of the Kyrgyz Republic

37 The National Statistical Committee, the specified compilation, pp. 31

38 Ibid. p. 31

39 Ibid. p. 120

40 Science and education in the Republic of Kyrgyzstan. The Statistical Compendium. The National Statistical Committee, 2012, p. 137

41 According to the Tax Code of 17 October 2008, income tax on budgetary institutions has been increased by 20 percent which influenced the increase of the cost of the contract

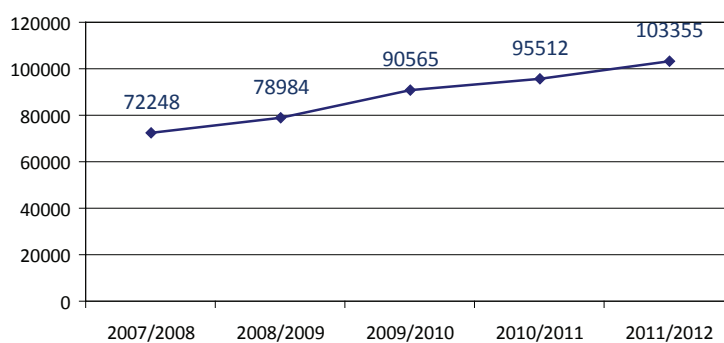
42 Science and education in the Republic of Kyrgyzstan. The Statistical Compendium. The National Statistical Committee, 2012, p. 154

43 Ibid. pp. 115-135

Agency for Vocational Technical Training, in cooperation with international and non-governmental organizations (NGOs), undertakes annual vocational orientation for young people, including actions to promote technical careers for young women⁴⁴. In addition, the training of young men and women in professional knowledge and skills is organized (for examples, see Box 11). However, despite the measures taken, the share of women in this category of students has been decreasing (see Figure 23)⁴⁵.

The increased proportion of male students at the primary and vocational education levels has been conditioned by men's active participation in the region's traditionally 'female' professions such as seamstresses, cooks, hairdressers and waiters, because of the high demand in the labour market. At the same time, there has

Figure 23. Number of students of primary and vocational education institutions



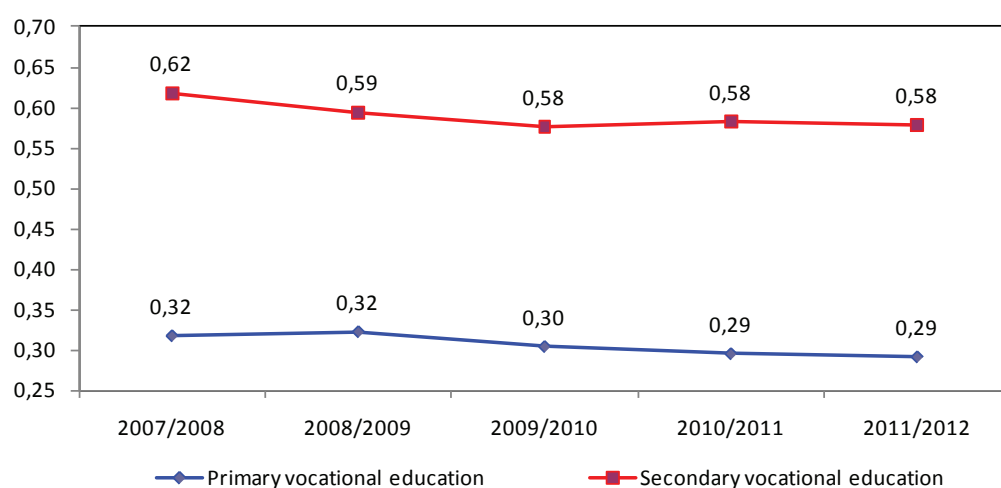
Source: National Statistical Committee of the the Kyrgyz Republic

Box 11. Girls' Day⁴⁵

Girls' Day was held in 2012 in Kyrgyzstan with the aim of enhancing employment opportunities for young women through engagement in professions that have been predominantly male. This project has been successfully implemented in many European countries over the last 10 years. During the day, more than 2,000 technical school students received on-the-job training in technical professions at 138 enterprises in the cities of Bishkek and Osh. Companies that hosted one-day interns included furniture manufacture, car dealers, auto repair shops, bakeries, and television and radio companies.

The event was initiated by the Ministry of Education and Science, the Ministry of Social Development, the Agency for Vocational Education and the Chamber of Commerce and International Business Council, with the support of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Society International Cooperation) and the Federal Ministry for Economic Cooperation and Development (BMZ).

Figure 24. Proportion of women among students of primary and secondary vocational education institutions



Source: National Statistical Committee of the the Kyrgyz Republic

44 Fostering women's access to and benefits from vocational education. ADB pilot project, AVTT, 2013

45 <http://edu.gov.kg/ru/presscentr/novosti/109-girls-day-kyrgyzstan.html>



been an expansion in the range of traditionally 'male' occupations on the supply side, such as electricians, welders and plumbers⁴⁶.

In summary, women continue to hold leading positions at the higher and vocational education levels. However, the share of women among students at all levels of vocational education has been decreasing.

Share of women among economically active population

Currently, the majority of employed women have received higher and secondary specialised vocational education⁴⁷. The decreasing levels of education for women reinforce the declining trend in the proportion of women among the economically active

population (41.8 percent in 2011, a fall of 1.2 percent compared to 2008). Across all the key labour market indices – such as the level of economic activity, employment and unemployment – women have lower indices than men (see Table 4).

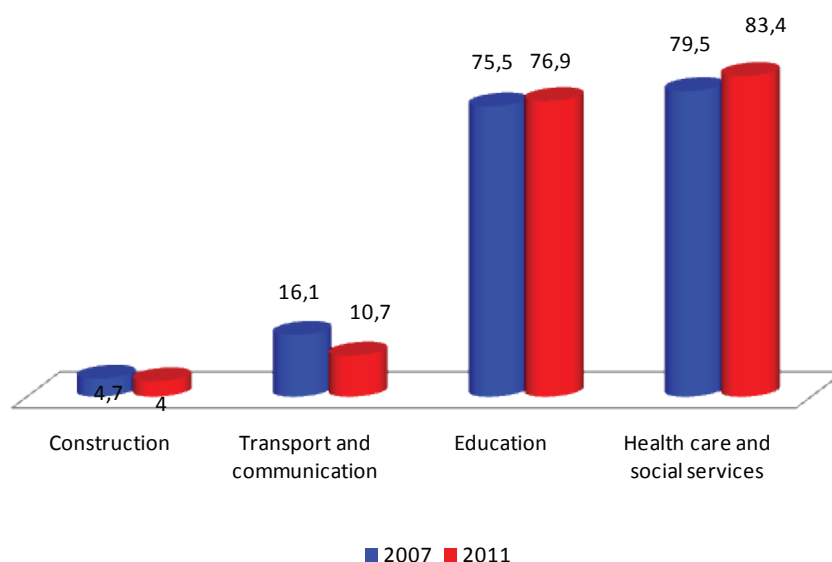
Full implementation of women's economic capacity is prevented by their concentration over the categories employed in socially oriented, low paid types of activities (see Figure 25). There is a growing number of women among workers and managers at small, medium and large enterprises (see Table 5). Private employers are willing to hire women, partly because women with low achievement-oriented ideals are – stereotypically – less demanding of the size of wages or career success compared to men.

Table 4. The level of economic activity, employment and unemployment (%)

Year	The level of economic activity (%)		The employment rate (%)		The unemployment rate (%)	
	Women	Men	Women	Men	Women	Men
2008	54.8	76.5	49.7	70.9	9.4	7.3
2009	53.1	76.3	47.9	70.7	9.8	7.4
2010	52.3	76.6	47.1	70.7	9.9	7.7
2011	52.8	77.5	47.6	71.6	9.9	7.6

Source: National Statistical Committee of the Kyrgyz Republic

Figure 25. Proportion of women among the employed population by types of economic activity



Source: National Statistical Committee of the the Kyrgyz Republic

46 Fostering women's access to and benefits from vocational education. ADB pilot project, AVTT, 2013

47 National Statistical Committee, the specified compilation, p. 92

Table 5. Number of female and male employees and managers at small, medium and large businesses (thousand people)

Year	Managers				Workers			
	Small		Medium		Small		Medium	
	Women	Men	Women	Men	Women	Men	Women	Men
2008	4	12.7	0.9	2.4	6.1	46.7	12.7	31.2
2009	4.6	14	0.9	2.4	6.4	45.4	12.4	28.7
2010	4.7	13.4	1	2.5	17.1	33	12.4	26.1
2011	5.3	14.2	1	2.5	15.6	30.3	12.7	27.3

Gender socialisation ensures the reproduction of professional attitudes of women and girls towards 'women's' occupations and 'women's' opportunity⁴⁸.

Expert assessments show that the terms of contracts, their conclusion procedures and working conditions provided by private employers are often discriminatory. There are cases when contracts stipulate a prohibition of maternity leave and corresponding compensation, as well as working hours regulations that do not comply with labour legislation. Women encounter sexual harassment and other forms of gender-based violence in the workplace⁴⁹.

Unemployment rates are a prime example of gender-specific features of the situation of women and men in the labour market. Women dominate in terms of officially registered unemployed in the 30 to 49 age group⁵⁰. The economic activity of women in other age groups has been limited to their traditional functions of childbearing, upbringing of children/grandchildren and housekeeping.

Women remain primarily responsible for child care and the education of children. However, the current regulatory framework is not fully supportive in creating an enabling environment for women to look for jobs or embark on career development. During the period 2007 to 2012, the percentage of children enrolled in pre-school education has doubled, however, the number of children attending

pre-school education remains low (only 15.3 percent of the total number of children of pre-school age). Studies have demonstrated that the involvement of children in pre-school education is heavily depend on mothers' employment, i.e. the higher the level of employment, the higher the percentage of children attending pre-school education.

Domestic work is not visible and not recognised as labour⁵¹. Women tend to spend money three times more than men on household items and twice as much on childcare. The average size of women's pensions is 3,368 Soms, which is 10 percent less than the average pension size for men⁵².

In rural areas, women spend more time for cooking, washing and cleaning, compared to women in urban areas. At the same time, rural men spend two times less caring for their children and grandchildren compared to their urban counterparts⁵³. Thus, women not only have fewer opportunities in the labour market, but also less free time to invest in their human capital which brings about strategically disadvantageous consequences⁵⁴. The effects of economic crises, reduced incomes and restricted access to vital resources (water and food) increase women's domestic workloads, leading, on one hand, to the reproduction of the gender division of labour and failure to account for women's contribution to the country's GDP and, on the other hand, to women's increasing vulnerability.

48 The monitoring results of the implementation of the Law 'On equal rights and equal opportunities'. Economic empowerment of women.

49 The materials of the expert seminar on Goal 3 'Promote gender equality and empower women', May 2013

50 The National Statistical Committee, the specified compilation, p. 106

51 The monitoring results of the implementation of the Law 'On equal rights and equal opportunities of women and men'. Economic empowerment of women. The Association of women entrepreneurs. 2013

52 The National Statistical Committee, the specified compilation, p. 121

53 Ibid. pp. 126, 128

54 Monitoring of the implementation of the Covenant on Economic, Social and Cultural Rights (United Nations, 1966). An Innovative Solution, 2013

Ratio of female to male wages

The reduction in women's economic activity in general and their concentration in low-paid labour areas create significant gaps in the women-to-men wages ratio (in 2011, this index was 78.4 percent. The highest wages for women were for those employed in the financial sector: 18,257 Soms, which is 2.2 times higher than the average wages for women nationwide⁵⁵.

There is a negative correlation between the proportion of women and the average monthly earnings in a given profession, i.e. the higher the proportion of women in this occupational group, the lower the average wage⁵⁶.

During the period from 2000 to 2011, Kyrgyzstan failed to maintain the initial index it had when acceding to the MDG Declaration, with the gap gradually increasing. In 2011, a marked decrease in the gap occurred, associated with rising wages in the education and health sectors in particular, which traditionally employed more women. Thus, the observed change cannot be regarded as a result of the overall trend.

It should also be taken into consideration that, in certain types of economic activity and within specific structures, the reality differs significantly from averages. For example, as a result of an analysis of the women-to-men average wages ratio undertaken in the Ministry of Labour and Employment, it was discovered that, from 2009 until 2011, the gap increased in men's favour by more than 60 percent (see Figure 26).

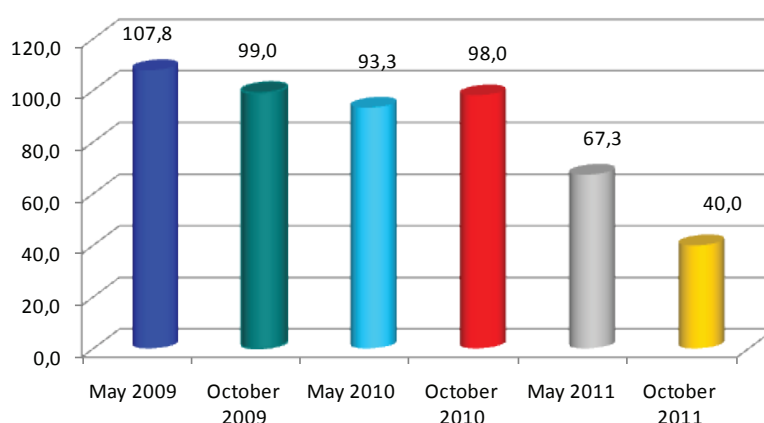
The methodology for calculating average 'female' and 'male' income does not take into account that, due to low wages in traditionally 'female' sectors of employment, employees are forced to work for

1.5\2 wage rates. According to the experts assessment this perceived as one of the forms of discrimination against women and hides women exploitation in the labour market. It is important to note that a policy of wages in the socially-oriented sectors of the economy further reinforces existing stereotypes about the 'cheapness' of women's work and 'female' occupations. This in turn leads to a diminishing of the professional characteristics and the placing of personal and emotional aspects of job responsibilities as the criteria for quality of work in these sectors, thereby adding to already existing stereotypes.

To overcome the problem of vertical segregation, Kyrgyzstan has introduced special measures to support women's political participation. One of the most significant measures, adopted in 2007, was the introduction of quotas for women on the party lists for parliamentary elections. As a result of this measure, representation of women in the Fourth Convocation of the Jogorku Kenesh rose to 31.1 percent, a fact noted in the Second National MDG Report (2010). However, this proportion has not been maintained: in 2011, the proportion of women-parlamentarians dropped to 20.8 percent. The problem was that the quota system did not provide a mechanism to allow women-parlamentarians to retain their 'women's' mandates (every fourth position on the party list) after the elections. In the case of a woman-parlamentarian withdrawal, the mandate was handed down to the next candidate on the list, usually a man.

Following Kyrgyzstan's transition to a parliamentary system of governance in 2010, competition for seats among the parties has become intense. The Law 'On elections of the President of the Kyrgyz Republic and Deputies to the Jogorku Kenesh of the

Figure 26. Trends in the women-to men average earnings ratio: a MLEM 2009-2011 Case Study

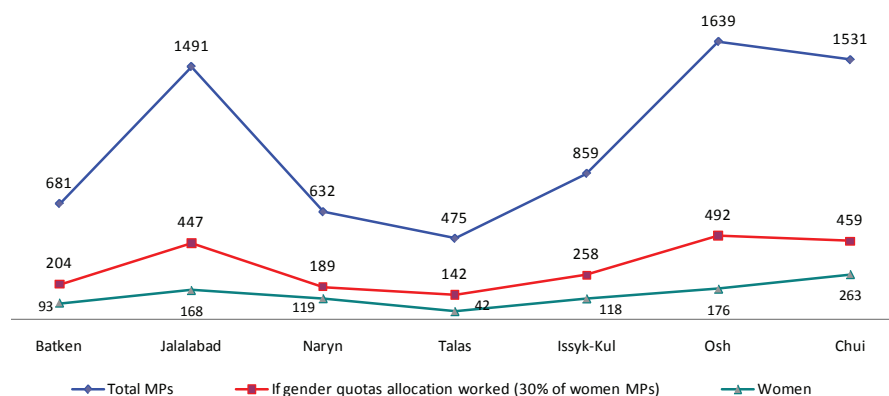


Source: Monitoring of the implementation of the Covenant on economic, social and cultural rights (UN, 1966), Innovative solutions, 2013

55 The National Statistical Committee, the specified compilation, pp. 119-120

56 Ibid

Figure 27. Number of women – members of local councils by oblasts: Current situation and hypothetical situation in gender quotas allocation



Source: A study of women's political rights violations during the elections to the local keneshes (councils) of the Kyrgyz Republic in November 2012. Presentation by R. I. Jeenbaeva, the "Women's Support Center" Public Association, March 2013

Kyrgyz Republic' was amended to the effect that, in the event of an early retirement of a member of a parliament elected as a result of the distribution of seats among political parties by the lists of candidates, his/her mandate is transferred by a decision of the Central Election Commission to a candidate from the same list, based on the decision of the respective political party⁵⁷. These changes have become an additional instrument of pressure by parliamentary parties on women-parlamentarians, to force them to give up their mandates.

As a response to the decrease of women in of local councils, quotas for underrepresented groups were introduced in 2011 for local elections as well. However the results of the last local

elections in 2012 indicate that required quota principles were not observed. (see Figure 27).

Removing women from the decision-making process at the local level limits their access to natural resources such as water and land. With numerous challenges faced, including that of climate change, there is an inequitable distribution of risks and an increased burden on the most vulnerable sectors of the population, including women⁵⁸.

The level of representation of women among State and municipal agencies' employees has been declining (see Table 6 below), although there are provisions for giving preference to the underrepresented gender during competitive selection of specialists for State and municipal services.

Table 6. Women's representation in the State and municipal agencies of administration

Years	The number employed with agencies of State administration (%)		Political and special posts		The number of employed with bodies of local self-governance (%)		Political municipal posts	
	Women	Men	Women	Men	Women	Men	Women	Men
2008	45.4	54.9	26.1	73.9	37.5	62.5	6.2	93.8
2009	44.4	55	27	73	36.5	63.5	3.9	96
2010	39.1	60.9	27.4	72.6	36.1	63.9	4	96
2011	39.9	60.9	25.2	74.8	35.8	64.2	4.9	95.1
2012	39.8	60.2	25.5	74.5	35.1	64.9	4.2	95.8

Source: National Statistical Committee of the Kyrgyz Republic

57 The Law of the Kyrgyz Republic of 25 November 2011, No 221

58 Gender and climate. UNDP/UN Women, 2013



A study of gender structure within State agencies has revealed the existence of a more 'authoritative' unwritten orientation: every public service employee must strive to be gender neutral, as the public service system has zero tolerance towards 'family roles'. The agencies' management do not support any 'special' treatment for men or women, who are all only regarded as financiers, statistical experts, agrospecialists, etc. Compounding familial and maternal roles with public services is complicated by the

absence of infrastructures of State support for working mothers (secured tickets for a family vacation, a place for the kids in the departmental kindergartens, etc.)⁵⁹. Thus, despite the special measures introduced to support women, gender gaps at the decision-making levels have been preserved, while there is also an increasing trend of imbalance, due to the quit of women from the State and municipal administration that considerably reduces the system's capacity for promoting social justice and equality.

2. Bottlenecks and risks in achieving the Goal

The indicators on gender suggest that achieving MDG3 by 2015 is unlikely. The strategy for achieving gender equality by 2020 notes that the gender approach, despite Kyrgyzstan's international and national commitments on gender equality and human rights, is not a compulsory element of planning, implementing and monitoring the policies being introduced. The lack of effective mechanisms for monitoring and evaluation of gender policy implementation results in situations where the rules of gender equality promotion, particularly those concerning quotas allocation and support for women's political involvement, are not respected by the legislature.

Thus, national development strategies and programmes, including departmental plans, do not contain gender budgeting. Moreover, even specific gender programmes lack adequate financial provisions. The costing of the implementation of the National Action Plan for the achievement of gender equality for 2012-2014 made in 2012 demonstrated that budget gap for the most critical interventions is 452 ml. soms, or nearly 90% of the total budget required for NAP.

The weakness of the institutional mechanism for gender policy severely limits the promotion of necessary anti-discriminatory measures, including an 'equal employment' policy, balancing work and family responsibilities and preventing harassment in the workplace, both in the public and private/informal labour sectors. The issue has become particularly acute due to the political instability of recent years: with every change of power and changes in the structure of government come renewed discussions on how necessary a structure responsible for gender policy implementation is. In accordance with the Law 'On equal rights and equal opportunities of men and women', an authorized body dealing with gender issues is an indispensable part of the government system.

Deformation of legal and social norms in the gender policy exacerbated by crises directly affects both the public and private spheres of citizens' lives. In the public sphere it gives rise to unequal access of women and men to the decision-making process. In private and professional activities, it leads to increased gender segregation and inequality, including the growth of gender-based violence (such as domestic violence)⁶⁰. There is a growing number of applications from – mainly female – domestic violence victims lodged with crisis centres and other specialised institutions providing social and psychological support⁶¹. Every year the cases of murder as a result of such violence have been reported. There are also increasing number of cases of violence against children in families, including sexual violence. However, due to the imperfection of the statistics, the available data does not reflect the true scale of violence within the family.

The problem of domestic violence is exacerbated by the lack of public investment in the prevention of violence and protection of victims. Politicians do not take into account the fact that the State bears significant costs related to the consequences of violence, such as victims requiring assistance from medical and social institutions, law enforcement agencies and judicial processes (as research shows, direct costs related to one case of murder resulting from domestic violence can cost more than 1.5 million Soms⁶²).

Against this background, alarming signals are being sent by the latest initiatives of parliamentary deputies to limit the rights of young women to travel abroad, triggered by cases of violence against young Kyrgyz female migrants. It is obvious that these initiatives are mainly motivated by prejudice regarding the rights and abilities of woman to make her own decisions regarding her life strategies. Promotion of such initiatives contribute to the growing national influence of

59 Monitoring of the implementation of the Covenant on Economic, Social and Cultural Rights (United Nations, 1966). An Innovative Solution, 2013

60 The National Strategy for achieving gender equality by 2020

61 Men and women in Kyrgyzstan, National Statistical Committee. 2012

62 Materials of the 'How much does domestic violence cost?' project Bishkek, 2011

religious organizations and institutions that promote the patriarchal ideology.

Violation of women's rights is caused by the decreased activities of women's movement organizations, including the

other factors, the low level of interest among young people in the values of equality, preconditioned by growing religious sentiments among youth and the large-scale migration of young people to neighbouring countries in search of earnings.

3. Lessons learned

The weak gender-sensitive policy of the state creates the risk of further gender marginalisation, also a global trend. For example, donor support for strengthening gender equality is limited mainly to support for the education and health sectors. The absence of strategic policy level support makes gender initiatives fragmented and creates the perception that gender equality is not a critical issue.

A lack of state budget support and transparency create serious obstacles to reaching gender development goals, for example, 90 percent of the National Plan for Gender Equality 2012-2014 is not secured financially. It has become clear that the government is unable to mobilise resources internally. As per World Bank estimates⁶³, countries with low income require US\$13 billion annually to ensure a progress towards gender equality.

Gender-based violence, including domestic violence, greatly hinders the achievement of the gender equality goals. Poor implementation mechanisms of the Law on Social and Legal Protection from Domestic Violence (2003) limits access to justice for those in need. Under these circumstances, the practice of gender-based violence becomes increasingly common, routine and increases vulnerability.

Civil society organizations can play a key leveraging role in promoting gender equality in Kyrgyzstan. However, the limited capacity of civil society, particularly women's organizations, does not allow them to advocate for and monitor policies aimed at achieving gender goals.

Progress towards achievement of gender equality will require comprehensive actions to address systemic and behavioural challenges.

4. Recommendations

Achieving the economic empowerment of women and gender parity at decision-making levels is the priority of the National Strategy for achieving gender equality by 2020 and the National Plan of Action for 2012-2014. The National Plan of Action was adopted in 2012, pursuant to UN Resolution 1325, 1820, also aims to advance the economic and political empowerment of women. Further action to ensure progress in achieving MDG3 must be implemented in line with the adopted policy documents and based on appropriate State budget allocations. It is necessary to improve the legal framework, strengthen the authorized body on gender equality-issues by enhancing its status and capacity, and ensure parliamentary control over public authorities' compliance with the requirements of the Law on equal rights and equal opportunities for men and women.

Measures to improve gender-related indicators – based on the

results of targeted studies⁶⁴, – could include:

Medium-term measures (until 2015)

- improve legislation aimed at strengthening practical mechanisms for policies and gender equality implementation;
- strengthen parliamentary control and procuracy supervision over the enforcement of legislation on gender equality, including protection from gender-based violence;
- introduce the issues of professional identification in the terms of reference and the mandate of educational institutions, to motivate students to master professions that are not traditional for their respective gender;
- conduct gender-sensitive vocational orientation campaigns at the level of school and vocational education;

63 Gender equality now. Accelerating the Achievements of the MDG. <http://unifem.org/attachments/products/GenderEqualityNow.pdf>

64 For example, see the above reports on the monitoring results for the implementation of the Law on equal rights and equal opportunities, as well as those for the implementation of the Covenant on economic, social and cultural rights



- pilot mechanisms for the promotion of anti-discrimination policies in the workplace, including the system of norms that preclude discrimination based on marital status at all stages of the work process and harassment in the workplace, as well as measures to encourage employers to promote gender-sensitive treatment in the workplace, including flexible forms of employment and mechanisms to involve men in child care;
- pilot models for the monitoring of labour rights implementation, taking account of gender-related factors and principles of non-discrimination in different sectors of the economy (public, private, informal); and
- direct the positive changes towards a reduction of the gender wage gap in all spheres of labour relations.
- institutionalize a system for increasing gender competence among managers and workers in different sectors (state, public and private), as well as encouraging employers to promote policies of gender equality both at the organizational and operational levels;
- develop campaigns for the prevention of gender inequality and violence, including domestic violence; and develop large-scale programmes to combat all forms of fundamentalism (neo-liberal, religious, etc.); and
- expand and institutionalize the mechanisms of women's political leadership support, especially among young and rural women; and strengthen civil society organizations.

Long-term measures (after 2015)

- secure the rights to vocational training and decent employment for men and women through the implementation of budget-secure State programmes on the basis of the indicators of human development, taking into account the principles of diversity, transparency and accountability;
- institutionalize a system of gender factors analysis in the labour market development on the basis of improved statistical data, including aspects of unpaid work of family members in household management and gender-specific forecasts of the educational trajectories and the economic activity of the population;
- promote success stories of women workers with an emphasis on non-traditional areas of work in order to boost the self-esteem and confidence of women in various professions, as well as highlighting through media women's contribution to the economic development of the country;
- expand and strengthen quota allocation mechanisms at the level of elective and executive bodies of authority and power; conduct systematic monitoring of balanced gender representation at all levels of decision-making; and improve statistics;



GOAL 4.

REDUCE CHILD MORTALITY

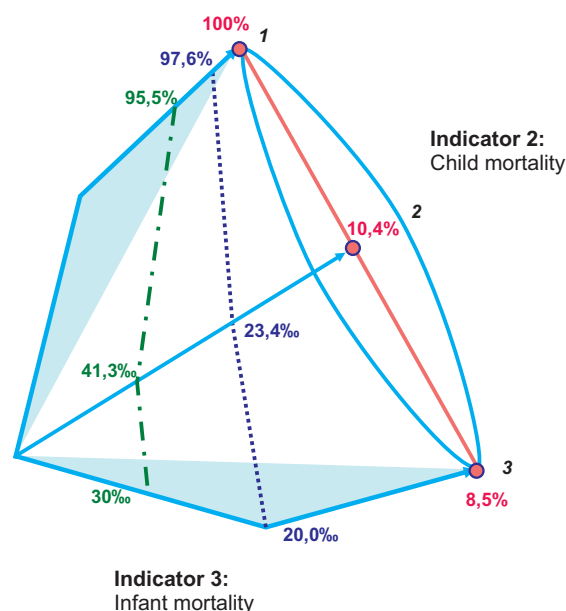


Goal 4. Reduce child mortality

TARGET

reduce the under-five mortality rate by two-thirds

Figure 28. Dynamics of achievement of MDG 4



Source: National Statistical Committee of the Kyrgyz Republic

1. Current situation and trends

Under-5 child mortality has followed a steady downward trend in recent years, reaching 23.4 per 1,000 live births in 2012 against the baseline indicator of 41.3 in 1990.

Box 12. National Health Reform Programme “Den-Sooluk” 2012-2016

Built on the achievements of the Manas and Manas Taalimi programs the Government of the Kyrgyz Republic adopted National Health Reform Programme ‘Den Sooluk’ for the period 2012 to 2016⁶⁵.

Den Sooluk is aimed at ensuring universal (general) coverage of population with high quality health, sanitation prevention services regardless of social status, gender differences and insurance status of the population. Den Sooluk Program is designed to address following 4 priority areas:

- maternal and child health;
- prophylactic of cardiovascular diseases;
- control of tuberculosis; and
- control of HIV infection spread.

Den Sooluk Programme therefore largely linked to achievement of MDG4.

The strategic approach of Den Sooluk focuses on creating a strong link between program activities and their impact on health outcomes and is based on three basic principles related to each other and based on the foundations laid during the past reforms:

- expected improvement in health outcomes;
- core services needed to achieve the expected improvement in health outcomes;
- identification and removal of barriers in the health care system that prevent coverage with core services, thus hindering the achievement of expected improvement in health outcomes.

65 National Health Reform Program of the Kyrgyz Republic ‘Den Sooluk’ for 2012-2016

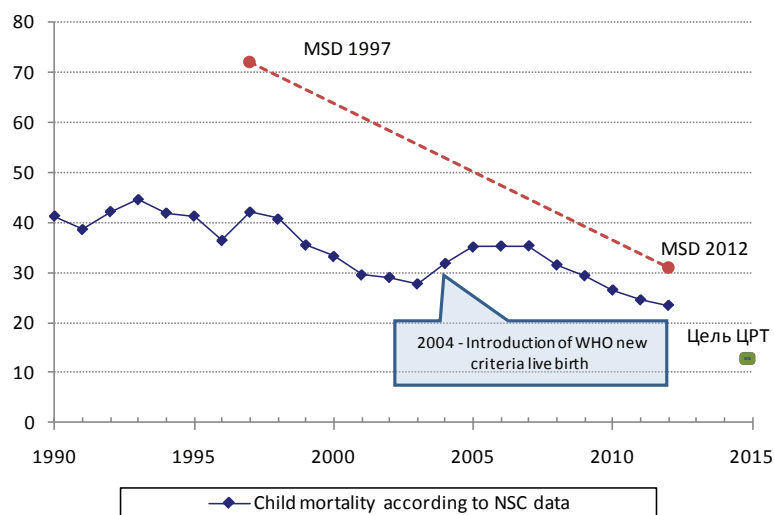


The infant mortality rate (under 1 year) in the country for 2012 was 20.0 per 1000 live birth in compare to 2011, decreasing by of 5.2 percent (2011-21,1 for 1,000 live births)⁶⁶.

Box 13. Methodological issues of defining MDG 4 indicators

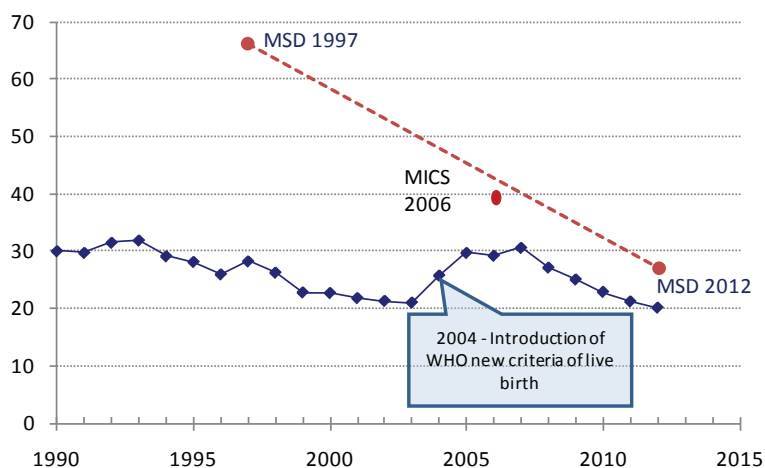
For purpose of ensuring the comparability to international statistics on infant and child mortality, and in connection with the transition to the criteria of live births and stillbirths recommended by the World Health Organization (WHO), the child and infant mortality rate for 2004 was accepted as basic indicator to estimate the progress towards achievement of MDG4.

Figure 29. Child mortality (per 1,000 live births)



Source: Multiple Indicator Cluster Survey (MICS) 2006. UNICEF. Medical and Demographic Survey (MDS, 1997), MDS Primarily Report (MEASURE DHS, ICF International, Calverton, Maryland, UnitedStates; UNFPA) 2012

Figure 30. Infant mortality (per 1,000 live births)



Source: Demographic and Health Survey (DHS, 1997). Preliminary report of DHS, 2012

66 National Statistical Committee of the Kyrgyz Republic



Table 7. Infant and child mortality rates (1997-2012)

Rate	1997	2006	2012
	DHS	MICS	MICS
Infant mortality	66.0	38.0	27.0
Child mortality	72.3	44.0	31.0

With the transition in 2004 to the criteria of live births and stillbirths recommended by the World Health Organization (WHO), Kyrgyzstan registered the projected growth of infant mortality due to improved registration of neonatal death (2004 - 25.6 per 1,000 live births; 2007 - 29.8, National Statistical Committee, according to the Ministry of Health - 32.6⁶⁷ (see Figure.29)). However, the official infant mortality rates are underestimated due to the fact that some of the deaths are not registered, concealed or incorrectly classified.

Bridging the gap between official government statistics and data from sample studies conducted with the support of international organizations such as UNICEF and USAID in recent years demonstrates the improvement in registration of live births and stillbirths⁶⁸.

The introduction of programmes that are evidence-based (basic prenatal care, integrated management of childhood illnesses, improve nutritional status, including fortification by homemade food complex of minerals and vitamins 'Gulazyk', etc.), as well as support for all health care provided under the programmes «Manas Taalimi» and «Den Sooluk» were key factors contributing to the steady decline in infant and child mortality.

A comparison of the results obtained by DHS in 1997, with the results of Multiple Indicator Cluster Survey of 2006, as well as preliminary data Multiple Indicator Cluster Survey 2012 show that the infant mortality rate decreased from 66.0 per 1,000 live birth to 27.0 and the child mortality rate from 72.3 per 1,000 live births to 31.0 (see Figures 28, 29, Table 7).

Infant and child mortality rates among boys is 19 percent higher than among girls, for example. In 2012 the infant mortality rate was 17.9 per 1,000 live(girl) births, compared to 21.9 per 1,000 live (boy) birth; and the infant mortality rate was 20.8 per 1,000 for girls and 25.9 for boys (from the NSC).

The main causes of mortality

The main causes of infant mortality⁶⁹ are conditions originating in the perinatal period - 63.5%, respiratory diseases - 13.7%, congenital anomalies - 13.6%, infectious and parasitic diseases - 4.6%.

High rates of child mortality in the perinatal period are connected not only to the quality of medical services, but also to the socio-economic status of the country. This is evidenced by the lack of access to clean water, especially for Family Physicians Groups/FAPs in remote villages and the lack of a minimum set of equipment necessary for the provision of quality health services in pediatric wards, including intensive care. In addition most of the roads in the villages are unpaved or ruined, making it difficult for mothers to quickly access medical institutions.

In the regions with the worst provision of clean drinking water there are high levels of child mortality from infectious and parasitic diseases: in Batken oblast in 2010 - 7.9 percent and in 2011 - 10.7 percent of the total child mortality, while in Osh oblast in 2010 - 8.9 percent and in 2011 - 7.9 percent (NSC).

About 80 percent of children die within the first 24 hours after admission to hospital or at home, from preventable causes - acute infections (ARI and AEI)⁷⁰.

Climate change and the associated social changes can lead to a deterioration in child and maternal health. So, it is noted that the pathology of the embryo development is equally determined by decreasing and increasing of ambient temperature⁷¹.

The age structure of infant mortality shows that over two-thirds are children who died in the neonatal period (0-27 days), of which 87-89 percent of the deaths occur in the early neonatal period (0-6 days)⁷².

67 Programme to improve perinatal care in the Republic of Kyrgyzstan for 2008-2017

68 Health of women and newborns in Kyrgyzstan and in the Chui region. Evaluation and justification of intervention. Zulfiqar A. Butta UNICEF., 2009

69 National Statistical Committee of the Kyrgyz Republic

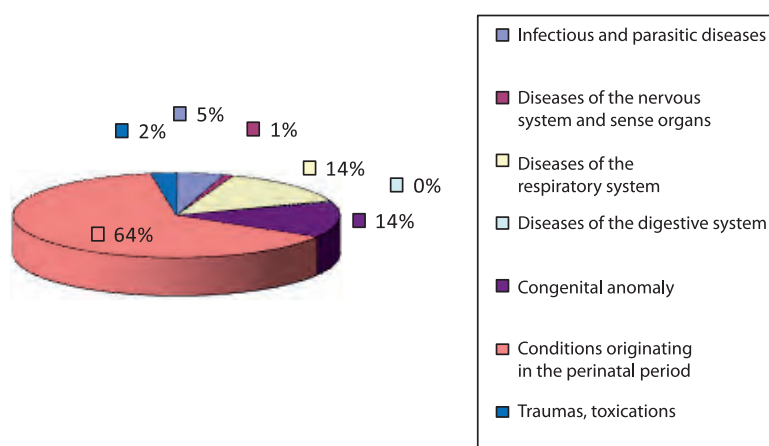
70 Social and medical causes of death in children. UNICEF, 2011

71 Overview Gender, environment and climate change. UNDP, UN Women, «BIOM», Kyrgyzstan 2013

72 Programme to improve perinatal care in the Kyrgyz Republic for the years 2008-2017



Figure 31. Structure of infant mortality causes in 2010 and 2012



Source: National Statistical Committee of the Kyrgyz Republic

To improve the health situation a programme to enhance perinatal care was introduced for the period from 2008 to 2017. The programme is based on the introduction of a system of regionalisation of perinatal care and to date: (i) clinical protocols have been reviewed and approved with the inclusion of priority interventions with proven effectiveness; (ii) a phased expansion of effective perinatal technologies in previously uncovered areas of the country has been conducted; and (iii) packages of perinatal services for each level of care have been developed⁷³. Implementation of the principles of regionalisation in caring for pregnant women and newborns has led to improvements in the infant mortality rate by reducing neonatal mortality⁷⁴.

The registration of deaths of newborns has also improved as a result of the introduction of the newborns register system.

Comparative indicators of child and infant mortality rates for 2010 and 2012 show reduced mortality in all regions except the city of Osh. A significant reduction in mortality is observed in Batken, Talas and Osh oblasts and Bishkek due to the successful implementation of programmes including perinatal care, and in the Batken region through the IMCI programmes at the hospital level. Osh city has seen an increase in child mortality, due to the admission of sick children with complications from remote regions and a greater migration of people living in poor conditions⁷⁵.

In 2010, there was an outbreak of polio in Central Asia. In response, in Kyrgyzstan, a two-stage regional polio vaccination cam-

paign was organized and as a result there were no cases of polio in Kyrgyzstan.

Kyrgyzstan has had polio-free status⁷⁶ for more than 18 years. Furthermore, over the past five years there were no registered cases of diphtheria.

Coverage by all types of vaccinations in 2012 at the national level is no less than 95 percent, while for measles it was 97.2 percent in 2011⁷⁷ and 97.6 percent in 2012 (RCI report 2012).

As a result of increased public funding for the health system, the co-payment for delivery services and health care services for children under 5 years of age and older citizens was abolished, the supply of medical institutions with drugs improved and informal payments for drugs decreased.

According to estimates by UNICEF and the World Bank⁷⁸, 21.8 percent of the 1,547 deaths among children under 5 years of age were related to malnutrition, together with 50 percent of moderate or severe delayed growth. Financial losses from mortality due to malnutrition amount to US\$4.45 million and from the loss of productivity as a result of malnutrition, US\$27.94 million. The total loss amounts to over US\$32 million. Most of this loss could be avoided by investing in programmes to reduce malnutrition.

There is a high prevalence of anaemia among children: anaemia was found in 26.1 percent of children under 5 years of life. The highest prevalence of anaemia among children was identified

73 Maternal mortality in the Kyrgyz Republic: an overview of trends. Preliminary version. World Bank, 2012

74 Report. Assessment of children's hospital services in Bishkek and the southern region of Kyrgyzstan. UNICEF, 2013

75 Health of women and newborns in Kyrgyzstan and in the Chui region. Evaluation and justification of intervention. Zulfiqar A. Butta, J.P. Han, Department of Maternal and Child Health, Aga Khan University (Pakistan), together with the Ministry of Health and UNICEF Kyrgyzstan, 2009

76 Certificate of the European WHO Office of 21 June. 2002

77 Data of National Statistical Committee, 2011

78 The World Bank/UNICEF Situation Analysis. Improving economic outcomes by expanding nutrition programmes in Kyrgyzstan, 2011



Figure 32. Child mortality by regions in 2010 and 2012 (per 1,000 live births)

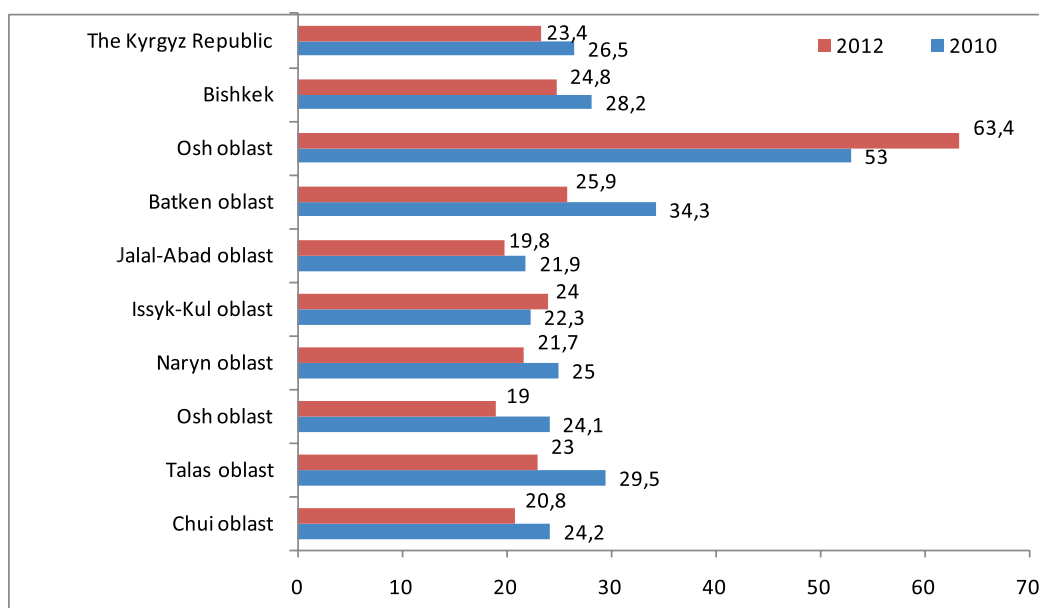
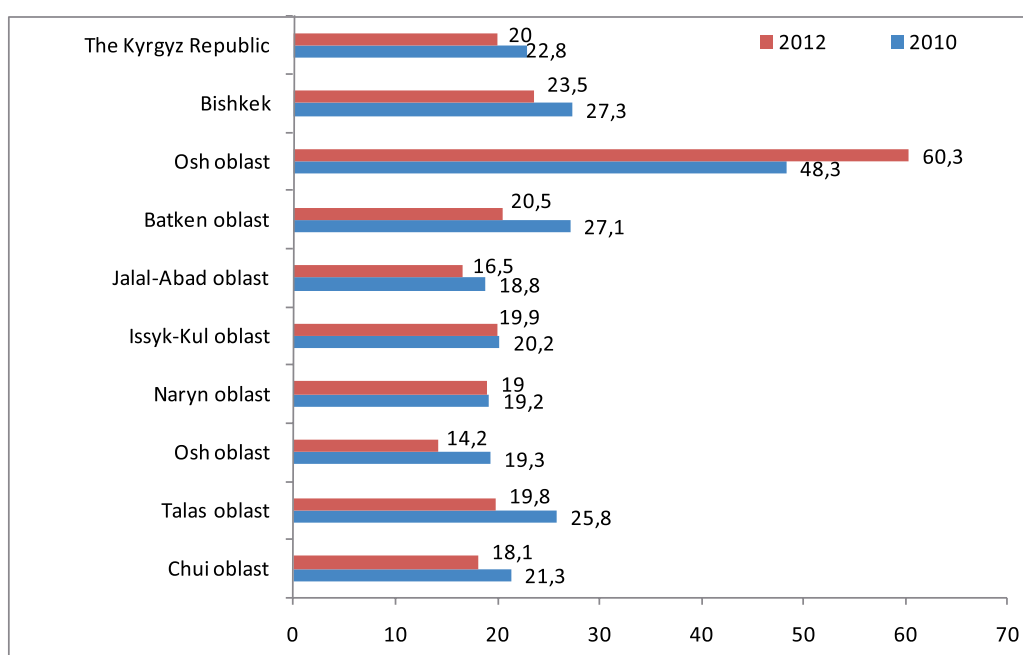


Figure 33. Infant mortality by regions in 2010 and 2012 (per 1,000 live births)



Source: National Statistical Committee of the Kyrgyz Republic

in the most vulnerable age groups: in the first 2 years of life (39.3 percent)⁷⁹. Cases of anaemia were higher among boys, with 28.4 percent compared to 23.6 percent for girls. Children from rural areas suffer from anaemia by one-third more.

In order to reduce the prevalence of anemia among children, in 2009 the Ministry of Health initiated a programme to enrich homemade food for children aged 6-24 months with the vitamin and mineral supplement Gulazyk. The advantage of this programme

was its comprehensive approach to solving problems caused by micronutrient deficiencies.

Assessing the impact of an integrated programme one year after its introduction, there was found to be a decrease in the prevalence of anaemia by 26 percent. This programme is currently being implemented at the national level, and more than 180,000 children aged between 6-24 months are receiving the vitamin and mineral supplement Gulazyk.

79 Study of the nutritional status of children aged 6-59 months and their mothers. Kyrgyzstan, UNICEF 2009



The 'Community Action for Health (CAH)' programme is recognised by the Ministry of Health as the main mechanism for long-term community mobilisation and health promotion. CAH empowers local communities to address their priority health issues and contributes to the creation of Village Health Committees (VHC) throughout the country. Key partners in this process are the Ministry of Health, the organization of primary health care and the health promotion service. In recent years the number of active VHC exceeded 1,200 across the country⁸⁰. VHC continue to provide education to the public on nutrition for pregnant women, young children (IIV, GA and complementary feeding, fortification of homemade food for children with micronutrient dietary supplements) and symptoms of diseases. VHC are an important link in bringing information to often isolated populations of villages. For example, in a survey of mothers in Talas oblast on sources of information about diet during pregnancy and breastfeeding, 80 percent of pregnant women and 60 percent of young mothers said that they received the necessary basic infor-

mation from the VHC. Most respondents also said that in the three months prior they met twice with VHC with each interview lasting at least 40 minutes⁸¹.

Kyrgyzstan was one of the first countries to accept the obligation to implement the basic principles of the Global Strategy for Women and Children Health in 2011⁸².

In Washington, at an international forum to save the lives of children 'A Call to Action for Child Survival' held in June 2012, Kyrgyzstan joined 80 countries in signing a commitment to significantly reduce child mortality by 2035, reducing the rate to 20 deaths per 1,000 live births.

There has been a steady decline in infant and child mortality in recent years in Kyrgyzstan, but the gap between targeted and projected actual indicators is significant. It is necessary to continue this downward trend further, requiring sustained effort and action. At the current rate of decline in infant and child mortality, the projected target will be achieved in 2017.

Box 14. UNICEF pilot project 'Promotion of social equality in the poorest and most remote areas' in the Batken region

The UNICEF pilot project 'Promotion of social equality in the poorest and most remote areas' in the Batken region in 2011 has shown positive results in the care of young children. The project consists of three components: (i) equitable, quality systems and response systems for children; (ii) increasing access to quality social services; and (iii) civil participation of adolescents and young people and partnerships for children's rights. The approach, focusing on providing a variety of services to children from the poorest and most vulnerable groups, is essential in Kyrgyzstan's plans to achieve the Millennium Development Goals. The project facilitated the development of an approach to improving the access of vulnerable women and children to quality health care. Consequently, 92 percent of women are aware of two or more symptoms of childhood diseases and when there is an urgent need for them to be hospitalized, while 58 percent of women know three or more symptoms of pregnancy complications. Within the project's implementation 121 children with special needs were identified. For each child an individual development plan to support the process of socialisation through integration into the educational and care programmes was initiated.

Box 15. The achievement of the Government of the Kyrgyz Republic in the reduction of infant mortality is that on the basis of the global assessment Kyrgyzstan in 2012 was included into the group of few countries that are on track to achieve MDG 4

Kyrgyzstan is for the first time included among the 15 countries that are on track to achieve MDG4. The estimation was made by UN Inter-agency Group for Child Mortality Estimation (IGME) was formed in 2004 to share data on child mortality, harmonize estimates within the UN system, improve methods for child mortality estimation, report on progress towards the Millennium Development Goals and enhance country capacity to produce timely and properly assessed estimates of child mortality. The IGME, led by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), also includes the World Bank and the United Nations Population Division of the Department of Economic and Social Affairs as full members.

Countdown to 2015. Maternal, Newborn and Child Survival: Building a Future for Women and Children. The 2012 Report

80 National Health Reform Program of the Kyrgyz Republic 'Densooluk' for 2012-2016

81 Report. Evaluation of the National Program of the Kyrgyz Republic 'Manas taalilimi' the Kyrgyz Republic. April 2011. P 39

82 http://www.who.int/publications/list/pmnch_strategy_2010/ru/index.html



2. Bottlenecks and risks in achieving the Goal

The system of referrals

The inadequate system of delineating the functions of organizations of primary, secondary and tertiary levels, as well as the system of referrals and counter-referrals for sick children in many cases led to duplication, irrational use of materials and financial resources. The issue of ensuring access to sub-specialists for outpatient care has not resolved. The emergency health care did not gain any further ground. Many organizations of the tertiary level are not able to provide high-tech health services. Furthermore, there are gaps in the regulatory mechanisms of private health organizations that have led to their uncontrolled operation.

Clinical Practice

Changing clinical practices and ensuring conditions under which evidence-based practices become the norm at all levels of health care, both in private and public sectors, is a complicated process.

In addition to the shortage of health care workers, many doctors have limited skills at both primary and secondary levels of health care, in managing the most prevalent illnesses in children. Thus, the assessment of in-patient care delivery has shown many children – 25-30 percent – are admitted to hospital unjustifiably.

In the case of the low awareness among mothers of dangerous signs of diseases, 70 percent of mothers have delayed seeking care and assistance, resulting in the death of their child during the first 24 hours following hospitalisation or birth at home. The review of medical records and the findings of a survey of parents found that 80 percent of deaths of children who died during the first 24 hours following admission to hospital or birth at home occurred due to avoidable causes: acute communicable diseases (ARI and AEI).

In recent years, there has been distrust by mothers of health workers and as a result, 12 percent of mothers sought care through folk/traditional healers⁸³.

The limited accessibility of emergency care has led to the delayed timeliness and quality of emergency care. Only 77 percent of mothers of deceased children had access to emergency care in their villages⁸⁴. The practical skills of health workers to provide both emergency out

patient and inpatient care to children are inadequate. There are constraints related to understaffed teams and properly equipped ambulances⁸⁵.

Outdated infrastructure of hospitals hinders the provision of quality health services to children (water, heat, sanitation, equipment, etc.). Laboratory services also need major upgrading.

Community based efforts

Programmes on promotion and protecting the health of the population, including children, are implemented by the Ministry of Health through public health services. Intensive efforts are conducted by the public health services to inform and educate the public on the diverse programmes available (IMCI- Integrated Management of Childhood Illness, CFHI – Child Friendly Hospital Initiative, EPC - Effective Perinatal Care), however, evidence shows that there barriers remain, associated with:

- lack of an intersectoral approach in promoting healthy lifestyles and prevention of non-communicable diseases (NCDs) in relation to the social determinants of health;
- insufficient engagement of the public in protection and promotion of their health, together with poor communication strategies;
- the mechanisms of service operation not being tailored to the requirements of the modern concept of public health.

Human Resources

There is a chronic shortage of health care workers in rural and remote areas of the Kyrgyz Republic. The problem is not in the absolute number of trained human resources, but in the number of specialists required in rural areas (e.g. family medicine doctors), lack of social and economic conditions to attract young professionals and the poor involvement of representatives of local self-governments (LSGs) and local state administrations (LSAs) in tackling issues of staff supply at the local level. Two key factors determine the choice of professionals in their place of work: the availability of housing (social benefits and the degree of social infrastructure development) and the remuneration.

Currently, the principle of doctors selection has been modified in accordance with the 'Programme for further promo-

83 Socio-medical causes of child mortality. UNICEF, 2011

84 Socio-medical causes of child mortality. UNICEF, 2009

85 Analysis and assessment of delivery of emergency health care in Batken oblast. UNICEF. 2013



tion of doctors working in health care facilities in remote areas, small towns and rural areas⁸⁶. Within the programme, upon receiving the appropriate written notice from the health care facility, 38,692 Som are transferred by the Ministry of Health on a quarterly basis to the deposit account of young doctors for three years.

Financing

Adequate funding is a critical prerequisite for ensuring maximum coverage of cost-effective health care services. As a result of increased public funding of the health system, the co-payment for services of child delivery, children under-5 and senior citizens was abolished, the provision of drugs to health care facilities has improved and informal payments for drugs have diminished.

However, the increased public funding combined with donor funds were not sufficient to cover the costs of an ever-growing number of admissions, the increase of eligible groups of the population and the inefficient structure of service delivery and clinical practice. The financing gap is estimated to be 27-39 percent of total expenditure and is filled through informal payments.

There is no mechanism of differentiated payment for services focused on quality as well as no sustainable policy for financing capital investment to improve the infrastructure⁸⁷.

The involvement of fathers in raising children

In rural areas, especially in the southern regions of the country, fathers tend to take less part in the early development of children than those in northern areas (32.7 percent against 70 percent respectively). The level of engagement of fathers of children living in cities is higher than that of fathers of children in rural areas (65.8 percent compared to 43.8 percent), while fathers of children in wealthy families are engaged more than those in middle-income families and the poorest families (75.3 percent compared to 34.9 percent). The children in Batken, Issyk-Kul and Naryn oblasts are more likely to be left home under the care of another child who

is under 19 years of age, or alone (20.5, 19.2 and 14.8 percent respectively)⁸⁸.

Immunization

The critical preventive measure on controlled communicable diseases in children is the timely immunization. Although the nationwide level of immunization remains high, in recent years increasing internal migration⁸⁹ and religious beliefs⁹⁰ have prevented some children from being vaccinated.

Drug provision

There is low public awareness about children's rights to health care, thus, only 26.9 percent of heads of household knew that their children under 16 were entitled to purchasing drugs at reduced prices for outpatient care⁹¹.

In the Kyrgyz Republic there is a potential risk of the trafficking of counterfeit drugs. This situation has arisen as a result of the weakened regulation of the drugs system and an imbalance between the government's policy commitments (taken under the Public Drug Policy) and the policy of the government to improve the business environment in the country. Pharmaceutical activities are not delineated from other commercial activities and the industry's status as a part of the health care system is not specified, thereby requiring the conducting of special professional inspections. In remote rural areas, however, access of the population to good quality drugs is limited, and there are communities with no drug stores or pharmacy points. Currently the new drug policy is under development which aims to address these gaps.

Information system

Efforts to establish an integrated health information system have not been finalized and consequently there is no unified, standard medical information system in practical healthcare, while modern information technology is poorly integrated into the system of medical education.

86 Decree of the Government of the Kyrgyz Republic as of 16 August 2012 N 570 'On measures for further promotion of doctors working in health care facilities in remote areas, small towns and rural areas of the Kyrgyz Republic'

87 The National Health Reform Programme of the Kyrgyz Republic for 2012-2016

88 The status of children in the Kyrgyz Republic. UNICEF. 2011

89 Report 'Assessment of implementation of the National Health Reform Manas taalimi Programme of the Kyrgyz Republic'. April 2011, p. 34

90 Formative Research on Immunization, M-Vector, UNICEF, 04.03.2013

91 Report on 'Assessment of implementation of the National Health Reform Manas taalimi Programme of the Kyrgyz Republic'. April 2011, p. 32



3. Lessons learned

The ongoing interventions in the area of child health care over recent years have enabled some critical lessons to be drawn on the streamlining of the system for providing accessible and proper quality health services to children.

Despite ongoing efforts to improve the delivery of health services to children, it is necessary to upgrade the system of liaison of health organizations of primary, secondary and tertiary levels. Frequently the health care provided to children at different levels of health care overlaps. Tertiary level organizations need support to develop as organizations providing highly skilled care to children. Emergency health care to children has not gained any further ground.

Most of the challenges related to the health of children require a comprehensive, sector-wide approach. The effective regulatory framework governing public health in the Kyrgyz Republic is not conducive to the promotion of a sufficient degree of liaison between the provision of individual services at primary level and at hospitals, thereby leading to diminished efficiency of some priority activities in child protection. There is an insufficient degree of cross-sectoral cooperation in the prevention of infectious diseases, anaemia in children, as well as in promoting healthy hygiene and sanitation (e.g. clean water, local infrastructure, etc.). The support of ministries and agencies, together with local authorities is required.

Community involvement in child health promotion programmes will encourage the improvement in access of children from vulnerable groups to health services.

Constraints with shortages and outflows of staff affect access to affordable health care, particularly for vulnerable groups of the population in remote rural areas. There is a high concentration of health staff in large cities, with shortages of staff in rural and remote areas (including of neonatologists, intensive care specialists, pediatricians and family doctors). The problem also lies in their distribution. The special measures taken to involve local authorities (LSAs and LSGs) in developing incentives for young professionals to work in the regions appear to be insufficient. The critical motivating factor for retention of health workers in the field, especially in remote areas, can be the incremented remuneration.

Adequate financing is crucial to ensure maximum coverage of children with cost-effective health care services. The critical achievement of health reform programmes has been the consistent annual increments in health expenditure as a proportion of total public spending, from 10 to 13 percent. As a result of increased financing, the co-payments for services on child delivery and for health services for children under-5 years of age were abolished, the drugs supply has improved and the informal payments for drugs and medical supplies have diminished.

4. Recommendations

Improving the system of referrals and repeated referrals

Measures are needed to improve continuity across primary and inpatient care organizations to provide continuous quality medical care for children in all branches of health care. Clear-cut criteria for referral and re-referral from one inpatient care level to another must be developed, together with mechanisms of reverse referral of children to primary health care institutions for follow-up observation. Further strengthening of the logistical and technical base of medical and preventive institutions that provide services to children is also needed, as well as improvements in the overall quality of services provided to children.

Improving the quality of services provided to children

The quality of medical services at the primary health care level can be improved through ensuring care and monitoring of healthy children and treating children with diseases, including:

- Ensure access of all children to the standard package of recommended preventive services, including child development assessment with the use of Child Development Cards, immunization according to the National Calendar, routine micro-nutrient fortification of food products (to prevent anaemia and other diseases, associated with micro-nutrient deficiency), diagnosis and treatment of anaemia and advice to parents on important preventive measures;
- Deliver proper quality medical treatment of childhood diseases (administration of antibiotics for pneumonia, oral re-hydration and zinc for in diarrhea, etc), and ensure assessment of the condition and timely referral for inpatient care; and
- Mainstream child-friendly initiatives in primary health care institutions.



The role of FAP and FGP nurses and paramedics should be increased to provide standard preventive care for children; the knowledge and practical skills of paramedics and emergency care doctors can be improved in assessing the condition and delivering emergency care for children by implementing evidence-based programmes/clinical guidelines/standards. Vehicles of emergency care units must be equipped with essential equipment and medicines necessary to provide emergency care for children.

Given the shortage of family doctors and a sufficient supply of FGPs/FAPs paramedics/nurses, including those in remote villages, it is necessary to consider a mechanism for delegating some doctoring functions to mid-level medical personnel through the introduction of evidence-based programmes (e.g. IMCI, BFHI programmes, etc.) and specify their functional duties.

The infrastructure and supply of equipment to health organizations must continue to be upgraded with the introduction of information technology (electronic card of patient, telemedicine, etc.).

A system for surveillance of congenital malformations must be established – given the increase in child deaths in recent years – to improve the newborn screening programme for congenital anomalies and improve the system of providing medical and rehabilitative care to children with disabilities.

Comprehensive support, including financial, must be provided for further implementation of the Programme for the Improvement of Perinatal Care in the Kyrgyz Republic for 2008-2017 (with perinatal conditions being the main cause of infant and child mortality).

New methodologies for investigating cases of child and infant mortality are needed – including ‘confidential enquiry into child deaths’ – to determine the causes and take appropriate measures to improve the quality of care.

Improving awareness of the population on child health related issues

Core services should focus on informing the public on issues related to the health care of children:

- The involvement of civil society and active community members should be increased in raising public awareness on the standard range of recommended preventive services for children under-5 years of age, (including nutrition, assessment of development, immunization, routine micronutrient fortification of food products [‘Gulazyk’], diagnosis and treatment of anaemia and advice to parents on care and danger signs of diseases in children).
- Information support can be improved to ensure social mobi-

lisation while conducting activities related to the health and development of children.

- Cross-sectoral cooperation in promoting children's health issues should be strengthened.

Formation of resources in the health care system

The prospects for the development of health care depend on the quality of training for the medical and pharmaceutical workforce. To date, the major requirement of the labour market for the public and private health sectors of the Kyrgyz Republic is the training of professionals at a level and quality that will meet the needs of society.

Mechanisms are needed to support the retention of personnel to assist their further promotion. Actions are also needed to reduce disparities in terms of health care workforce availability in urban and rural settings, especially remote areas.

Adjusting health care system financing

In relation to health care system financing, efforts should focus on strengthening the three main functions of financing (collection, accumulation of funds and procurement), determining an acceptable balance between the public and private financing of the health care system and increasing capital investment to improve the infrastructure of health care institutions that provide services to children. It is also important to accurately distribute the functions and responsibilities of all the structures within the sector. Improvements are also needed in the methods of payment for the activities of medical and preventive institutions that would take into account the medical services quality indicators.

Providing ongoing child immunization

Consistent State support is required to ensure continuous immunization, independent from external financing.

Improving the system of drug provision

Issues related to the quality and safety of drugs must be addressed, as well as those concerning the rational use of pharmaceuticals and provision of adequate drug management. Government regulation of drug management requires updating, including:

- a) take action to enable the adoption of effective legislation and to ensure public (involvement in) expert examination of the process of the development and monitoring of public drug policy;
- b) develop a new National Drug Policy of the Kyrgyz Republic, including an implementation plan and evaluation indicators; and



c) develop the information system of the Department of Drug Provision and Medical Technologies, ensuring access to information on the quality and safety of drugs.

Improving information technology

The integration and transfer of all programmes onto a single platform is needed to ensure data integrity, reliability of health statistics and the establishment of a unified health care information system.

The effectiveness of implementation of evidence-based child health care programmes depends on the commitment of health workers to the programme, as well as on consistent internal and external monitoring. A Centre for Programme Evaluation and Moni-

toring has been established under the NMCHC to enhance the implementation of maternal and child health programmes. It is necessary to train health professionals in monitoring of the ongoing mother-and-child health programmes and to develop programme monitoring tools.

Overall, the Kyrgyz Republic is falling behind in its efforts to achieve the MDGs. An effective approach to achieving the goal of reducing child mortality by 2015 is to cover essential health services to the most vulnerable children with strategies focused on the principle of equity⁹². A range of activities to improve the health situation of children being introduced by the national health care system have demonstrated its effectiveness and requires further implementation after 2015.

92 UNICEF. Progress for Children: Achieving the MDGs with Equity. No.9, September, 2010





GOAL 5.

IMPROVE MATERNAL HEALTH



Goal 5. Improve maternal health

TARGET 1

reduce maternal mortality rate by three-quarters
ensure universal access to reproductive health care services

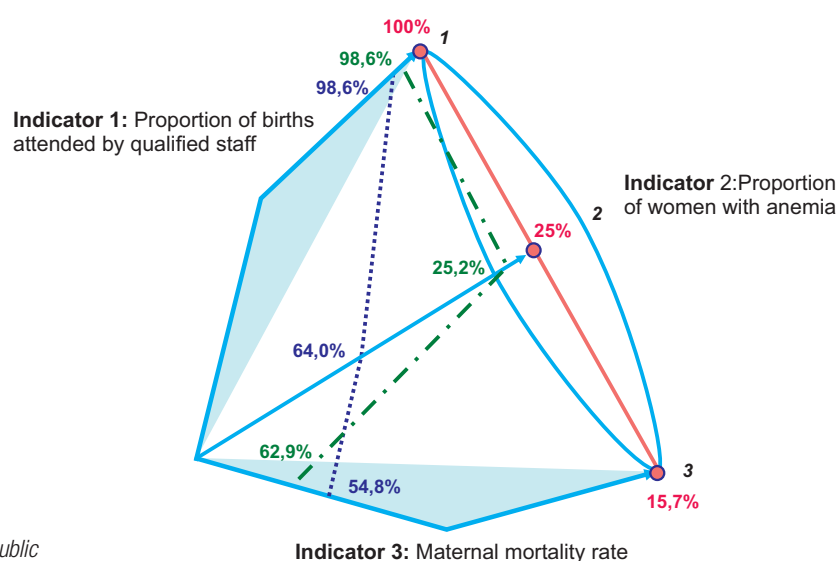
TARGET 2

ensure by 2015 the universal access to reproductive health

INDICATOR

share of women in reproductive health that use contraceptives

Figure 34. Dynamics of achievement of MDG 5



Source: National Statistical Committee of the Kyrgyz Republic

1. Current situation and trends

Scaling-up the scope of functions under MDG 5

The goals, key targets and indicators to monitor progress towards all MDGs in the Kyrgyz Republic were first defined in line with international definitions in 2003⁹³. The specific features of MDG5 include: (i) extending Target 1 in 2003, including the additional indicator 'Proportion of pregnant women with anemia'; (ii) adopting Target 2 in 2012, 'To ensure universal access to reproductive health services by 2015' with one target indicator 'Coverage of women of childbearing age using modern methods of family planning' (the indicator for 2011 was used as the baseline). This commenced in line with the adoption of a new National 'Den sooluk' Health Reform Programme of the Kyrgyz Republic for 2012-2016, whereby the indicated targets with specific objectives for achieving

them were outlined as the key expected outcomes of the programme under the section 'Mother and Newborn's Health'. Thus, MDG5 is the only goal where the definition has been expanded in the Kyrgyz Republic in relation to the initial definition.

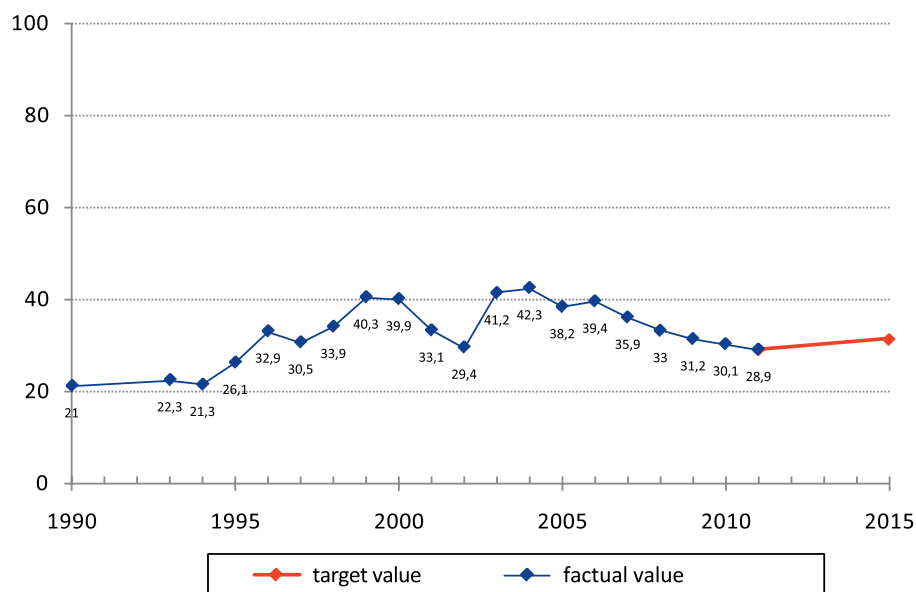
Estimates show that the Kyrgyz Republic is unlikely to achieve the goal of reducing maternal mortality by three-quarters by 2015⁹⁴. The majority of cases of maternal and infant mortality share common causes, and while over the last decade in the Kyrgyz Republic there has been progress towards reducing mortality in children under 5, there are virtually no positive trends with maternal mortality (the average annual rate of reducing maternal mortality from 1990 to 2010 was 0.2 percent, compared

93 The first report on Progress towards the Millennium Declaration Development Goals, Bishkek, 2003

94 Trends in Maternal Mortality: 1990 to 2008. Estimates developed by WHO, UNICEF, UNFPA and The World Bank. World Health Organization, 2010



Figure 35. Proportion of women of reproductive age using contraception (%)



Source: National Statistical Committee of the Kyrgyz Republic

with a global rate of 3.1 percent⁹⁵. Hence, according to the latest data, the Kyrgyz Republic has the highest maternal mortality rate of countries in eastern Europe and central Asia.

Principal measures in maternity care

The health sector seeks to achieve progress towards achieving the MDGs. The first 'Manas' Health System Reform Programme (1996-2005) made major structural transitions⁹⁶, modifying the format of service delivery, namely the introduction of "Family Medicine"⁹⁷ principles, and paying much attention to the revision of the content of medical practice. They included the development of clinical protocols based on evidence-based medicine and extensive training and continuous retraining of health personnel. The State Guarantee Benefit Programme (SGBP) and the Mandatory Health Insurance Additional Drug Package (MHI-ADP) were introduced to ensure the supply of drugs at the outpatient level of care where benefits for expectant mothers are provided.

During 2000-2004, the Kyrgyz Republic – with the support of the international donor agencies (UNFPA, UNICEF, USAID, CDC, ADB, GIZ and the German Development Bank) – initiated the implementation of a number of programmes on mother and child health care, based on WHO strategies. Programmes included 'Promoting Effective Perinatal Care', 'Preventing Iron Deficiency Anaemia in Pregnancy', 'Mother and

Child Health', 'Safe Motherhood' and others, that ensured such interventions as safe abortion, emergency obstetric care, social patronage, supply of essential equipment and improvement of infrastructure. However, the findings of studies suggest that the coverage of these interventions in the past did not exceed 20-30 percent of the population⁹⁸.

As part of the national 'Manas Taalimi' (2006-2011) and 'Den sooluk' (2012-2016) programmes, a sector-wide approach (SWAp) was used and maternal and child health were highlighted as a priority. During 2006-2011, it was possible to scale-up implementation of previously tested effective interventions related to care of women during gestation, childbirth and puerperium⁹⁹. Since 2006, as part of SGBP, the free health-care services for children under five and women in gestation and childbirth were expanded. The MHI ADP included supplements with micronutrients (folic acid and iron) prescribed to pregnant women. In order to improve the quality of skilled care for pregnant women, parturient and puerperant, newborns, training on 'Effective Perinatal Care', 'Neonatal Resuscitation' and 'Effective Newborn Care' are ongoing. The 'Strategic Assessment of Contraception and Abortion-related Policies, Programmes and Services in Kyrgyzstan' (supported by the Ministry of Health of the Kyrgyz Republic, WHO and UNFPA) project was designed jointly by WHO and the Ministry of Health to train midwives to follow safe abortion practices and ensure accessibility of drug induced abortion in rural areas.

95 Trends in Maternal Mortality: 1990 to 2010. Estimates developed by WHO, UNICEF, UNFPA and The World Bank. World Health Organization, 2012

96 Review of 'Manas' Health Reform Programme Implementation (1996 – 2005): Restructuring the system of health care delivery. Policy Review Paper №45

97 Review of «Manas» Health Reform Programme Implementation (1996 – 2005): Primary health care service. Policy Review Paper № 46

98 National 'Manas Taalimi' Health Reform Programme, 2006 – 2010

99 Review of National 'Manas Taalimi' Health Reform Programme Implementation, MH KR, April, 2011



A range of health services on perinatal care are delivered at PHC facilities (FAP, FGP, FMC), together with services for hospitals in line with WHO recommendations. Under the World Bank 'Results Based Financing (RBF)' Project, mechanisms to improve the quality of health services and to assist in achieving MDG4 and MDG5 are being developed. Managers of health organizations were actively involved in the process, better understanding of obstetric-related constraints enabled them to promote the practice of technologies based on evidence. With the support of donors, together with budget funding, the infrastructure and drug provision for maternity wards, etc. have significantly improved. However, these programmes are being implemented mainly in pilot areas and their further institutionalization is problematic due to the lack of funds available. Annually the Ministry of Health and other partners undertake a mapping exercise to outline the areas for implementation of perinatal programmes (prenatal care, EPC, PMTC, neonatal resuscitation, exclusive breastfeeding, etc.). According to official data, by the end of 2012 coverage by the programmes of maternity units had increased to 62 percent.

The newly adopted National Strategy for Sustainable Development of the Kyrgyz Republic for 2013-2017¹⁰⁰ indicates that further changes in people's attitude towards their health and quality of health care are imperative. The national 'Den sooluk' Health Reform Programme of the Kyrgyz Republic for 2012-2016 seeks to achieve these objectives through scheduled activities aimed at removing barriers in the health system and ensuring extended coverage for core services including maternal health care.

The Kyrgyz Republic has developed a National Reproductive Health Strategy (2006-2015). As part of the strategy, Oblast Coordinating Councils on Reproductive Health were created to address the issues related to health organizations. Due to lack of earmarked funding, the first phase priorities were only partially implemented partially (during 2006-2010): two new legislative and regulatory documents¹⁰¹ were adopted and activities were held to raise awareness on sexual reproductive health, HIV/AIDS and sexually transmitted infections (STIs) and the issuance of contraception supplies. The key aims pursued by development of the Law 'On Reproductive Rights and Safeguards for their Implementation' were harmonization of international standards in the field of sexual and reproductive rights of

citizens and enhancement of concern and accountable attitudes among citizens, government and organizations towards reproductive health care. Currently the plan of action and financing sources for the second phase (2011-2015) are being updated.

During 2006-2010 Kyrgyzstan was the one among the first CIS countries that launched the implementation of the WHO "Beyond the Numbers" initiative, where the emphasis was made on qualitative information for a more comprehensive analysis and understanding of the true causes of maternal mortality and the factors causing it. The pilot introduction of "Confidential audit of maternal mortality" at the national level and the "Confidential analysis of critical cases in obstetrics" on a pilot basis, helped to improve the quality of care during pregnancy and childbirth.

Under the 'Promoting of Perinatal Care Programme in the Kyrgyz Republic (2008-2017)' – with the support of international donor agencies including UNFPA, UNICEF, USAID, CDC, ADB and KfW, the German Development Bank – interventions such as ensuring proper antenatal care, creating 'Schools of Mothers' under primary care organizations to prepare pregnant women and their families for births (since 2012), effective perinatal care, prevention of nosocomial infections and the safety of medical procedures are under implementation.

The progress of activities and programmes is adversely affected by the financial constraints experienced by the health system. One of the key objectives of the health system of the Kyrgyz Republic is to improve financial protection (reduced out-of-pocket payments at delivery of care especially for the poorest groups of population and reduced average rate of co-payments compared to average wages), access to and utilization of health services (reducing financial and geographical barriers, greater regional equality in using MHI-ADP) and maternal health¹⁰².

Deviation in maternal mortality rates and causes of deviations

In relation to MDG5, according to official statistics, there is a declining trend in progress towards the benchmarks in almost all indicators. While assessing the trends in the maternal mortality rate, it is necessary to bear in mind that there are several sources of data collected in the country on a regular basis (by Republican Medical Information Center and National Statistical Committee (RMIC, NSC)) and as part of assessment studies (see Table 8)¹⁰³.

100 Approved by the Edict of the President of the Kyrgyz Republic as of 21 January 2013, № 11

101 The Law of KR 'On reproductive rights of citizens and safeguards of their implementation', approved by the Decree of Government of the Kyrgyz Republic No. 185 as of 20 April 2008 and the Law 'On fortification of flour for bread baking', approved as of January 2009

102 The Assessment of 'Manas Taalimi' National Health Reform Programme Implementation in the Kyrgyz Republic, April 2011

103 Maternal Mortality in the Kyrgyz Republic: Review of Trends, 2012, www.hpac.kg The study conducted by the Health Policy Analysis Center with the financial support of the World Bank under the activities of poverty assessment in the Kyrgyz Republic



Table 8. Maternal Mortality in the Kyrgyz Republic (per 100,000 live births)

Source	1990	1995	2000	2005	2006	2009	2010	2011	2012
RMIC	63	67.4	46.5	61	53	75.3	50.6	47.5	50.3
NSC	62.9	44.3	45.5	60.1	55.5	63.5	51.3	54.8	
WHO ERO ¹	62.9	67.3	46.5	61	55.5	82.8	50.6	-	
Studies of WHO, UNICEF and UNFPA			110						
Studies of WHO, UNICEF and UNFPA and WB, 2010 ²	73	98	82	77			71		
MICS					104				

Source: ¹ European Data Base 'Health for All', January 2012; ² – Data obtained with the help of statistical simulation

The discrepancies between official statistical data provided by NSC and RMIC/MH KR are due to:

- Untimely registration at ZAGS (Office of Vital Records) Offices of deceased pregnant women, parturient, puerperant by the relatives of the deceased;
- Inappropriate filling of the Medical Death Certificate by health workers (absence of records on pregnancy of a deceased woman, in particular, in case of death due to other causes);
- Absence of identity documents of a deceased woman (in such cases ZAGS offices do not register the death);
- NSC statistics also record cases of maternal mortality in the prison system, whereas RMIC data reflects the situation in the civil sector only;
- The NSC data reflect deaths registered at ZAGS offices in the reporting year regardless of the date of death, whereas RMIC data reflects deaths commenced in the reporting year¹⁰⁴.

The discrepancies in these evaluation studies are associated with the use of different methods of collecting data on maternal mortality (MICS – 'nurse based approach'¹⁰⁵, the study of WHO, UNICEF, UNFPA and the World Bank – a method of statistical simulation using available data from a variety of sources, including government statistics, census data, the findings of evaluation studies, etc.). As can be seen in Table 8, the maternal mortality

rate in the Kyrgyz Republic obtained from results of these evaluation studies is much higher than the official statistics. According to the NSC, during the period from 1990 to 2011, the maternal mortality rate has varied but with no overall consistent downward trend (see Table 8) and in 2011 was 54.8 per 100,000 live births (with a target goal of 15.7 per 100,000 live births by 2015). The significant rise in maternal deaths in 2009 (63.5 per 100,000 live births) is associated with the actions taken by the Ministry of Health to improve the registration of maternal deaths (approval of the definition of 'maternal mortality' in accordance with the ICD-10; the introduction of a moratorium on administrative penalties for cases of maternal mortality; and changes in the order and timing of reporting on cases of maternal mortality)¹⁰⁶. In addition, the introduction of the 'confidential enquiry into mother's death' and 'confidential review of near-miss cases in obstetrics' on a pilot basis will contribute to the scrutiny of cases of maternal mortality and improve the quality of care in the future.

Regional differences in maternal mortality rate

According to RMIC, in the mid-1990s, the mortality rate caused concerns in Issyk-Kul (188.5) Naryn (134.3) and Jalalabad (88.8) oblasts and the cities of Bishkek (103.7) and Osh (98.4). In subsequent years, the situation in certain regions has improved but remains inconsistent in regions with poor socio-economic development: Naryn (especially over the period 2002-2005, although there have since been improvements in 2011) and Issyk-Kul oblasts (high

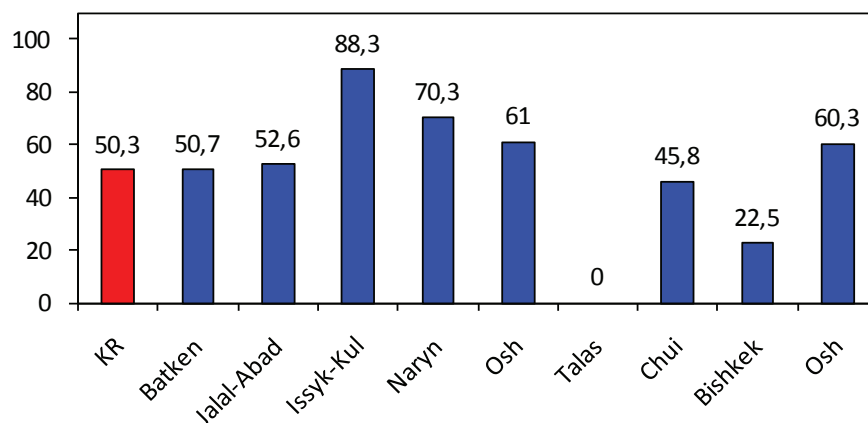
¹⁰⁴ According to the Order of Ministry of Health 'On Improving the entirety of registration, timely notification of relevant authorities on maternal death cases and reliability of the maternal mortality indicator' the information on maternal deaths should be reported to the Ministry of Health and MIS of MCH NC by phone within one day, the emergency notification on maternal deaths within three days and the documentation at MIS MCH NC within ten days. However, in 2011, out of 70 cases of maternal death, only in 23 cases (32.9 percent) was the information reported and with a delay of between seven days to one month

¹⁰⁵ Multiple Indicator Cluster Survey, 2006, Monitoring of Children's and Women's Status, Kyrgyz Republic. NSC KR and UNICEF

¹⁰⁶ The order of the Ministry of Health Ref. No. 330 as of 24 June 2011 'On improving the entirety of registration, timely reporting to respective agencies on maternal death cases and validity of maternal mortality indicator'



Figure 36. Maternal mortality by region (on 100 000 live births), 2012



Source: Republican Medical Information Center

figures remaining since 2005, including 88.3 in 2012). Significant improvement has been achieved in Talas oblast where there were no cases of maternal death registered in 2012 (compared to 87 in 2010 and 40.9 in 2011).

According to the NSC, until 2000, the incidence of maternal mortality was more prevalent among the urban population (which is probably due to underreported cases in rural areas). Since 2000, the situation has changed: there is a declining trend among the urban population, from 60.3 in 2000 to 32.1 in 2010, and a significant increase among the rural population, from 39.4 in 2010 to 61.3 in 2010. According to 2010 data, the maternal mortality rate is 1.9 times higher among rural women than among urban women.

Causes of maternal mortality

In terms of the structure of maternal mortality (to 2003), the leading causes were toxemia/gestosis, followed by septic complications and haemorrhages. Since 2004, the primary cause of maternal mortality is haemorrhages (31.1 percent in 2012), followed by preeclampsia/eclampsia (17.6 percent) and sepsis (13.5 percent), i.e. these are conditions which depend on proper care and monitoring of a woman during pregnancy, childbirth and puerperium. There is also a discernable rise in extragenital pathologies (23 percent in 2012). Other causes count for 14.9 of deaths (e.g. pulmonary embolism, anesthetic implications).

The quality of emergency obstetric care directly affects the process of labour as untimely and improper care can pose a threat to the

life of a pregnant woman. In many cases the threat can be prevented with the early diagnosis of complications and need for surgical intervention. The quality of training of health professionals, availability of logistical supplies and preparedness of health organizations to provide EOC are vital in ensuring the sufficient quality of emergency obstetric care (e.g. with haemorrhages). Maternity wards, especially at rayon level, generally lack proper logistical supplies (equipment, drugs, trained personnel, etc.). The effective perinatal technologies¹⁰⁷ are not yet implemented in 43 percent of all maternity facilities. According to the data of 2012, there were 29.8 percent of cases (22 women) of maternal deaths at city and rayon hospitals, 28.3 of deaths (21 women) at oblast facilities, 8.1 percent of deaths (6 women) at maternity hospitals in the cities of Bishkek and Osh, 12.2 percent of deaths (9 women) at national facilities and 3.3 percent of deaths (2 women) at home and en route to the facility¹⁰⁸. Regarding cases of eclampsia and preeclampsia, deaths have declined over the last decade: thus, in 2000, the ratio of hypertensive disorders was 38 percent but had fallen to 22.2 percent in 2011. This is due to both improved diagnostics of hypertensive disorders and effective interventions. Poor infection control in health organizations is likely to lead to a rise in septic complications.

After, 2000, the proportion of 'other' causes has increased (from 18.8 percent in 1999 to 28.8 percent in 2010). These include amniotic fluid embolism, pulmonary embolism, anaphylaxis, etc. There has also been a rise in the proportion of maternal deaths indirectly related to obstetric causes (including extragenital pathology

107 Data of MIS MH KR

108 Briefing Note 'On key performance indicators of health organizations of the country in 2012 and targets for 2013'



- CVD, acute hepatitis, pneumonia/pleurisy, etc.). Thus, according to data for 2012, extragenital diseases are the second most common causes of death (23 percent or 17 cases¹⁰⁹ compared to 10.7 percent in 2003). Generally, women are not fully prepared to the time of pregnancy, largely due to a lack of information on reproductive health and family planning. An increase in the incidence of death in women due to tuberculosis has been noted in recent years.

The current trends in maternal mortality rates are associated with a variety of circumstances and factors, including: the steady rise in the birth rate since the early 2000s, leading to an increase in the number of young women born in the 1980s and 1990s, who have now reached child bearing age; and an increase in the fertility rate from 2.7 in 2006 to 3.1 in 2010-11. Thus, in 2010, the highest birth rates were observed in Naryn and Talas oblasts (3.9 children on average per a woman of childbearing age)¹¹⁰. The barriers in the health system include poor infrastructure of maternity hospitals and units (lack of premises, equipment and its maintenance, vehicles, skilled personnel, etc.); and socio-economic factors (migration, low standards of living, unemployment, malnutrition, lack of social benefits, low public awareness on health-related issues and the growing influence of cultural characteristics)^{111, 112}.

Dynamics of the other indicators under MDG 5

The coverage of maternal health services in the Kyrgyz Republic is traditionally high. The proportion of births attended by skilled personnel totals 98.3 to 98.5 percent on average. However, high rates of coverage compared with the unsatisfactory situation with maternal mortality clearly testify to challenges in terms of availability and quality of services. The good health of an expectant mother and that of a child is dependent on effective perinatal care that contributes to healthy development of a foetus and the successful outcome of a pregnancy for a woman. Hence, it is imperative to improve the quality of services delivered throughout the perinatal period, including the delivery of a range of antenatal services. The review of indicators of early registration of pregnant women in gestational age of up to 12 weeks showed a declining nationwide trend over the last two years (from 1992 to 2001: 71-74.6 percent, 2010: 65.1 percent and 2011: 52.1 percent). This trend was caused by performance indicators of Bishkek, Chui, Talas and Jalal-Abad oblasts and to a lesser extent, Naryn oblast. Data for 2012 shows an improvement to 76.7 percent.

The rate of anaemia among pregnant women remains to be high. According to NSC, the indicators for 2011 have risen to 64 percent,

Box 16. Application of the MDG Acceleration Framework (MAF) in the Kyrgyz Republic

In the first half of 2011, the Working Group of the United Nations Development Group on MDGs (UNDG MDG) proposed and developed the MDG Acceleration Framework (MAF) to provide more coordinated, effective and efficient support to countries seeking to achieve internationally recognized development goals including the MDGs. The framework aims to identify and rank the bottlenecks that slow progress towards achieving the MDG targets and find ways to accelerate overcoming of these bottlenecks.

In early-2013, the Government of the Kyrgyz Republic and UNCT decided to join the countries that have applied the MAF. The Government of the Kyrgyz Republic has a strong commitment to addressing issues related to the achievement of MDG5. The implementation of this initiative has enabled the Kyrgyz Republic to gain numerous advantages:

- conduct in-depth analysis of the current situation in the field of maternal health, based on a rigorous methodology;
- raise discussion on MDG5-related issues at the national level with the involvement of a wide range of stakeholders, including the public sector (Ministry of Education and Science, the Ministry of Economy, Ministry of Social Development, Ministry of Labour, Migration and Youth, etc.), international organizations and civil society organizations;
- highlight the inclusive nature of issues related to maternal health and the important input of socio-economic and cultural factors to accelerating the achievement of MDG5;
- develop a plan of action to accelerate MDG5, including priority interventions to be implemented in the near future, with the principal executors identified. Following expert consultations the priority areas for the impact of MAF in the Kyrgyz Republic included: reproductive health, effective perinatal care and emergency obstetric care. Each of these areas is crucial from the point of view of accelerating the achievement of MDG5;
 - determine the amount of required funding and the existing financing gap within each of the proposed areas, which is intended to be covered through the public budget and parallel financing of donors' aid;
 - integrate the newly developed plan of action to accelerate progress towards MDG5 in the plan for implementation of the ongoing National 'Den Sooluk' Health Reform Programme of the Kyrgyz Republic for 2012-2016.

109 Briefing Note 'On key performance indicators of health organizations of the country in 2012 and targets for 2013'

110 Demographic year-book of the Kyrgyz Republic, NSC. 2011

111 Maternal Mortality in the Kyrgyz Republic: review of trends, 2012, www.hpac.kg. The research is conducted by Health Policy Analysis Center with the financial support of the World Bank under poverty assessment activities in the Kyrgyz Republic

112 Plan of Actions to Accelerate towards MDG5, 2013. The paper is drafted with the support of the United Nations system in the Kyrgyz Republic



which is 2.5 times higher than for 1990. This indicator is closely linked to external factors, for example, the state of the economy, the lack of jobs (including as a consequence the high rate of internal and external migration) that reinforce the adverse effects on all spheres of society, and the health of a mother, in particular. The political events of 2005 and 2010¹¹³ were an additional destabilizing factor that led to the deterioration of key indicators (growth of poverty rate, migration, etc.). The findings suggest that the poverty rate in 2011 – estimated based on consumer spending – was a national average of 36.8 percent, a rise of 3.1 percent on the previous year. This rate equates to 2,436,000 people living below the poverty line, of whom nearly 70 percent were in rural communities.

Data from NSC shows that over the period from 1990 to 2011, the quality of nutrition deteriorated: consumption of meat and meat products fell by more than two times, the consumption of milk and milk products by nearly three times, the consumption of fruits and berries by 1, 2 times and the consumption of fish and fish products

by 4 times compared to the rate for 1990. The survey of health workers shows that in the case of anaemia, some pregnant women experience financial constraints for the purchase and maintenance of the full course of iron supplements (due to high prices and lack of health insurance and access to benefits programmes)¹¹⁴.

There has been a steady decline in the proportion of women of reproductive age using contraception, from 38.2 percent in 2005 to 28.6 percent in 2012. In the Kyrgyz Republic, the contraceptive provision is ensured mainly by international organizations. In recent years, contraceptives are largely supplied by UNFPA and the Global Fund. Given the importance of this issue (prevention of abortion and its complications in case of unwanted pregnancy) and despite the limited resources available in the country, currently the recommendations and a mechanism for the smooth transition from humanitarian supply of contraceptives to their public financing are under development and the latter is scheduled to cover at least 20 percent of the needs of poor and vulnerable women.

2. Bottlenecks and risks in achieving the Goal

The foundation for progress towards achieving MDG5 is to ensure economic, social and political stability in the country as soon as possible and mobilize and coordinate all related sectors. In addition, as part of the MAF initiative, the areas that have a significant effect on attainability of MDG5 and that require immediate intervention are identified. These are: reproductive health care, effective prenatal care and emergency obstetric care. Hence, the particular importance of ensuring a well-arranged and high-quality emergency obstetric care is highlighted.

Existing data suggests that during the period from 2004 to 2011, financing of maternal health services increased from 213.5 million Soms to 761.1 million Soms. However, the situation is not so optimistic if the proportion of this benchmark in total gov-

ernment spending on health care is considered. Thus, in 2004 the proportion of spending on maternal health was 9.9 percent, but in 2011 it had fallen to 7.9 percent. Given the current circumstances, it can be concluded that maternal health care related interventions are underfunded which in turn affects the quality of health services provided¹¹⁵.

Financing challenges also include the poor infrastructure of both PHC facilities (lack of essential facilities at FAPs and FGPs with beds) and obstetric hospitals, the constraints with continuous supply of hot and cold water, electricity and heat, sewerage systems, which pose threats to safety (clean deliveries) and prevention of nosocomial infections. Furthermore, there are insufficient supplies of laboratory-diagnostic and curative equipment and unresolved is-

113 2005 – overthrow of the President Akaev's regime, 2010 – overthrow of the President Baskiev's regime

114 Maternal Mortality in the Kyrgyz Republic: review of trends, 2012, www.hpac.kg. The research is conducted by Health Policy Analysis Center with the financial support of the World Bank under poverty assessment activities in the Kyrgyz Republic

115 Plan of Actions to Accelerate Progress towards MDG5. The paper is drafted with the support of the United Nations System in the Kyrgyz Republic, 2013



sues of routine annual maintenance of medical equipment, including the procurement and delivery of spare parts and repair. The limited transport infrastructure and lack of emergency care vehicles significantly affect the timeliness of admission of pregnant women for treatment, especially those residing in remote areas. The late provision of medical care remains one of the core reasons for maternal mortality occurring at home or during transportation to the hospital.

Effective perinatal care services (EPC) are not mainstreamed in some maternity facilities, while there is also a currently unmet need for training on EPC for managers and health staff in maternity hospitals and units (anesthesiologists, neonatologists, obstetricians-gynecologists and midwives), as well as the staff of FGP/FAP. Furthermore, EPC needs to be further institutionalized in under-graduate education system.

Internal logistical procedures and management of health care system in the sphere of maternal care are inadequate, including: delayed provision of curative and diagnostic care, insufficient transportation and consultation services; shortcomings in planning and procurement of consumables, necessary pharmaceuticals, medical items, blood and blood substitutes; and inadequate and inconsistent internal audit (NMCR, CQIS, infection control, monitoring the operational condition of auxiliary services, etc.). There is also ineffective continuity in the performance of PHCs, hospitals and local self-governments (LSG).

The limited skilled workforce at PHCs, especially in rural settings, and poorly promoted system incentives affect the quality of antenatal care (untimely registration for antenatal monitoring; low level/poor quality of laboratory diagnostics and monitoring of pregnancy complications; low coverage of full range of antenatal services and in particular, for internal migrants and rural women). The supply of healthcare workers in obstetric facilities (anesthetists, neonatologists, obstetricians-gynecologists) is disproportionate and mainly concentrated in the cities of Bishkek, Osh and oblast centres.

There is insufficient coverage of the rural population and informal sector by MHI, including internal and external migrants and pregnant women without identification documents. Frequent changes of residence and the absence of registration documents exaggerate the inadequate mechanisms of enrollment and subsequent hospitalization of pregnant women. Female labour migrants working in neighbouring countries are not able to receive adequate antenatal care and prefer to return home before childbirth, often with abnormal pregnancies. In the families of male labour migrants, women

usually have a high workload for household maintenance.

In rural areas, where most male members of labouring families are earning money, the burden of running the household falls on women. Heavy manual labour has a negative impact on health during pregnancy. Women fear losing their jobs and do not take maternity leave which also has critical implications for maternal and child health. The package of social benefits for pregnant women is limited and many women are unaware that they may be eligible to receive lump-sum compensation as part of state guarantee package. There is a low level of awareness among the general population on the benefits available to pregnant women and parturient under the State Guaranteed Benefit Programme and the Additional Drug Package of MHI on the supply of drugs to outpatient facilities (contraceptives, iron supplements, laboratory and diagnostic services, etc.).

Reproductive health is the most critical prerequisite for planned pregnancy and safe delivery as it implies a safer sexual life, greater ability to conceive children and the opportunity to make informed decisions on family planning. The challenges include insufficient awareness of the population, in particular of adolescents and youth, on issues of reproductive and sexual health (including family planning and safe contraception). The network of youth friendly services is not promoted adequately, thereby restricting their access to reproductive and sexual health-related consultative and health services. The implementation of clinical protocol on family planning and contraceptives for the health personnel of PHC also limited in some cases.

There has been a steady growth in the number teenage mothers. Early motherhood is a social phenomenon that has historical, religious, ethnic and social roots. It is most commonly associated with early marriage (through parental contract, bride kidnapping, polygamy and religious marriages), early sexual experiences in the absence of knowledge on reproductive health, conflicts with parents, socially vulnerable families and sexual crimes against minors. Thus, in 2010, in relation to the rate of births among women of between 15 to 19 years of age, the Kyrgyz Republic was ranked the fifth among 35 Eurasian countries. Regarding the incidence of abortions in the 15-19 year-old age group, the country is in the middle ranking. In 2011, there were 1,214 births among girls aged between 15 to 17 years (1.2 percent of all births) and 10,543 among women aged between 18 to 19 years (8.5 percent of all births). The official data on births and abortions in minors are incomplete and there is scope to improve data collection in private health clinics and offices ¹¹⁶.

116 Review of Early Motherhood Problem in the Kyrgyz Republic. PC 'Citizens against Corruption', Bishkek, 2003



The current uncertainty regarding sources of financing for the National Reproductive Health Strategy (2006-2015) prevents the implementation of the second phase, focused on adolescent reproductive health, cancer of the reproductive system, together with the prevention and control of violence.

The key challenges related to global climate change have already been manifesting themselves in the country: increased lack of access to water and desertification, increased frequency of extreme weather events, local destruction of ecosystems and, as a consequence, a growing threat to the health of women.

3. Lessons learned

The lessons learned from the implementation of programmes that address maternal health issues are numerous. To achieve the maternal mortality goals it is necessary to ensure:

(i) significant coverage of the target population, particularly pregnant women and mothers, with services of proven effectiveness. Despite the progress made, the coverage of key services remains insufficient due to the limitations in financing, the lack of accountability for the results of activities and the lack of attention to the improvement of clinical practice by health professionals and managers of health care organizations;

(ii) an increase in the level of training to enable staff to learn modern methods of care and attention. In addition to general training, there is a need to improve the quality of learning in the workplace and to include additional mentoring and supervision, performance monitoring of quality indicators at the level of health care organizations and medical audits. Activities to improve the quality require additional resources for the training of trainers and visiting facilities across the country;

(iii) further improvement and investment in the infrastructure of health care organizations. In connection with weak equipment, tertiary obstetric and regional organizations must progress in the

development of the principles of regionalization and referral system, which are the key elements of a perinatal programme;

(iv) the development of a systematic approach to the organization of prevention and control of nosocomial infections. This requires special attention to the prevention of infections during pregnancy, childbirth and for newborns and measures introduced to improve infection control in maternity institutions;

(v) the presence of an effective strategy to raise awareness among the population about their rights under the health benefit programmes (the State Guaranteed Benefit Programme and the Additional Drug Package of MHI), which will be a contributing factor to improve access to guaranteed services (for example, COP preparations of iron, folic acid, etc.). In addition, it is necessary to raise the responsibility for the health of the family by increasing access to information and public education on reproductive and sexual health and safe motherhood;

(vi) improvements in the quality of data collection targets for effective monitoring and decision-making. In recent years steps have been taken to improve the reporting of cases of maternal mortality. However, there are areas that require targeted interventions (for example, data on abortion, maternity minors, etc.).

4. Recommendations

To accelerate MDG5 in the Kyrgyz Republic by 2015, a plan of action has been devised under the MDG Acceleration Framework (MAF). Given the complex nature of the issues related to MDG5, the existence of barriers within the health care system itself and the significant impact of external factors (social, economic, cultural, etc.), the Action Plan includes activities requiring significant interaction among different sectors and covering issues outside the health care system. Three priority areas have been identified for strategic interventions to be undertaken both at the individual and population level:

- Reproductive health care

- Effective perinatal care:
- Antenatal care
- Childbirth and postpartum care
- Emergency obstetric care.

Key activities at the community level are those aimed at improving young people's awareness and knowledge of reproductive and sexual health issues and changing the behaviour of women and their families on issues of family planning and safe motherhood (including awareness on the prevention of anaemia, maternal nutrition and danger signs during pregnancy) to ensure they use health care



institutions to receive the guaranteed services.

Interventions at the individual level should take into account the type, scope and quality of services provided, the system of repeated referrals and the needs of different target groups within the population, including socially vulnerable women.

The Action Plan should be implemented based on close inter-sectoral collaboration involving government agencies, local state administrations and local self-governments, as well as international, academic and civil society organizations. It is anticipated that the part of the Action Plan specifically covering cross-sectoral activities will be presented for the approval of the Government of the Kyrgyz Republic.

In May 2013, the United Nations Secretary-General received a historical report prepared by a high-level panel of eminent public figures on the development agenda preparation for the period af-

ter 2015, including new goals and measurable targets. Maternal health remains an area of concern, including access to appropriate services. Despite the majority of maternal deaths being avoidable, pregnancy remains one of the major health risk factors, particularly among disadvantaged women and women living in rural areas. There is a need to devote sufficient attention at the political level to strengthening the efficiency of and increasing the coverage by maternal health care, while attracting additional resources. After 2015, work to enhance the protection of the health of the mother will be continued within the framework of Target 4 'Guarantees of a healthy life'.

It should be noted that the Kyrgyz Republic has been selected for consultations on the programme of action and the development agenda post-2015, during which the reduction of maternal mortality is an important issue.





GOAL 6.

COMBAT HIV/AIDS,
MALARIA AND OTHER DISEASES



Goal 6

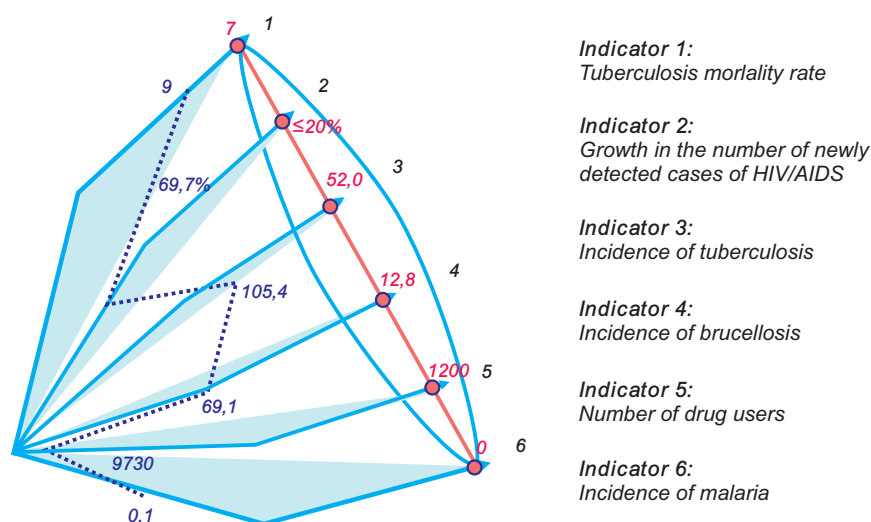
Combat HIV/AIDS, malaria and other diseases

TARGET

halt and begin to reverse the spread of HIV/AIDS

halt and begin to reverse the incidence of malaria and other major diseases

Figure 37. Dynamics of achievement of MDG 6



Source: National Statistical Committee of the Kyrgyz Republic

1. Current situation and trends

Main directions of the national health care programme

The Kyrgyz Republic continues its measures to combat HIV/AIDS, drug addiction, tuberculosis and other diseases monitored within the framework of MDG6. During the period from 2009 to 2013, the trends for the various indicators have been mixed: while progress was made in reducing brucellosis and malaria over the period, no such progress was observed in relation to HIV/AIDS, tuberculosis and drug addiction. The number of new cases of HIV infection and the number of injecting drug users (IDUs) are rising, while the emergence and growth of resistant forms of tuberculosis are a cause for concern. These problems occur alongside such achievements as the provision of financial protection for the population and improvements in the accessibility and effectiveness of the health system.

It should be noted that the unstable political situation in the country had a negative impact not only on the general welfare of

the population, but also hindered the implementation of reforms in the structure of the health care system. The integration of services into the general system of services provision concerning the diseases under MDG6 was not completed. These objectives formed the basis of the current programme of health reform 'Den Sooluk', which is focused on improving the quality of services by strengthening the delivery of services and public health services. The control of tuberculosis and HIV/AIDS are the priorities of the programme, on which measures will be taken to integrate services for these diseases into the system of services providing and strengthening primary health care on these issues. In 2013, the implementation of the State programme 'HIV/AIDS' and 'TB-4' commenced, including measures to strengthen inter-agency cooperation, community mobilisation, introduction of new technologies in the delivery of health care services and reform of the service delivery system.



HIV/AIDS

1. Current situation and trends

HIV infection is growing in the Kyrgyz Republic, as well as the other countries of Central Asia. According to WHO/UNAIDS, the Kyrgyz Republic is one of seven countries with the highest growth rate of the epidemic in the world. The increase in the number of newly detected HIV cases began in 2001; the largest annual increases were registered in 2009 and 2012 (see Figure 37 below).

The number of officially detected HIV cases increased by more than 20 times: from 202 cases in 2001 to 4,611 cases in 2012. Kyrgyz citizens accounted for 4,413 of all cases, with 198 cases among foreign residents and 532 persons who progressed from HIV to AIDS. During those years, 706 HIV-infected persons died, including 247 persons with AIDS. The HIV infection rate was 64.9 people per 100,000 and the incidence, 12.5 people per 100,000 in the Kyrgyz Republic in 2012.

According to the Ministry of Health of the Kyrgyz Republic, the estimated number of people living with HIV (PLHIV) is 12,040 (from the WHO SPECTRUM programme); it is three times higher than the number of officially registered cases¹¹⁷.

The cumulative data to January 2013 shows that the main routes of HIV transmission are: parenteral, including in-hospital HIV transmission, that accounts for 66.96 percent; sexual, accounting for 29.75 percent; vertical (mother-to-child transmission) totaling 2.94 percent; and 0.34 percent unspecified cases. The largest number of HIV cases is registered in the age group of 20-39 year-olds (68.55 percent). The gender distribution is 70.49 percent men

(3,111 persons) and 29.5 percent women (1,302 persons).

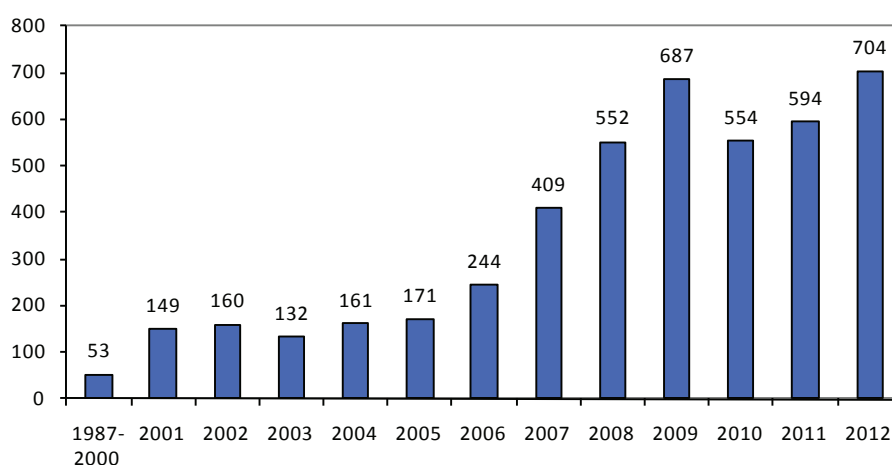
The country is in the concentrated stage of HIV epidemic. The parenteral route of transmission is still the basis of the epidemic, mainly through injecting drug use. For example, IDUs represent 59.8 percent (2,638 of 4,413) of the total number of reported HIV cases in the country, including cases in the penitentiary system. According to epidemiological surveillance conducted in 2010, the HIV infection rate among IDUs increased twofold since 2007 (from 7.7 to 14.6 percent), and in some regions of the country by more than 30 percent (in Osh). The HIV infection rate among prisoners increased from 3.3 percent in 2007 to 13.7 percent in 2010 (although this rise is associated with improved HIV detection among inmates).

It should be noted that the volume of HIV detection among IDUs tends to increase annually: Thus, the number of IDUs tested in 2010 was 2,237, in 2011 there were 1,886 tested and in 2012, a total of 2,488 were tested. A similar trend continued in 2013 (in the first six months of 2012 and 2013, there were 881 and 1,156 tested respectively).

According to the epidemiological surveillance, the prevalence of HIV infection among groups at risk, such as sex-workers and men who have sex with men (MSM) in 2010 was 3.5 percent and 1.1 percent respectively. Updated figures are expected from the epidemiological surveillance conducted in 2013.

In recent years, the HIV epidemiological situation in Kyrgyz Republic has undergone significant qualitative changes in the structure

Figure 38. Newly Detected HIV Cases in the Kyrgyz Republic¹¹⁸



Source: National Center for AIDS Control and Prevention

117 Country Progress Report on Global HIV/AIDS response. The Kyrgyz Republic, 2012

118 The target values for all indicators were calculated on the basic values; therefore the curves on the diagram for basic and target values coincide

of newly detected cases as well as in the regional distribution. For example, before 2006, the city of Osh had the highest incidence of HIV and rate of new HIV case detection, but since 2007, the number of new cases in Osh oblast, the Chui oblast, and Bishkek has grown significantly (see Figure 38 below).

During the period from 2001 to 2012 there was a steady growth in the number of HIV cases detected among women (from 9.5 to 29.5 percent), although the majority of the women were not from high-risk groups. The main factors contributing to the vulnerability of women to HIV are the poor socio-economic status, financial dependence, widespread early and forced marriages, inequality and violence in the family¹¹⁹.

The number of HIV cases in the country almost doubled during the period from 2006 to 2007, and increased by almost six times from 2006 to 2012 (as compared to the previous epidemic period of 1987-2005).

There is an increasing trend of HIV infection among children. The ratio of HIV positive children aged under 15 years in 2012 was 10.51 percent. As of 1 January 2013, there were 464 HIV cases¹²⁰ registered among children under the age of 15 years; there were 317 children infected parenterally and 130 children infected through vertical (mother-to-child) transmission. There were 35 HIV infected children who died, among them 12 who had AIDS. The increase in HIV infection rate among children in 2012 was due to the active detection of HIV infection among children born between 1 January 2004 and 31 December 2009 and children under 14 years during an HIV outbreak in hospitals in Nookat and Kara-Suu rayons of Osh oblast, the city of Osh and Bazar-Korgon and Suzak rayons of

Jalal-Abad oblast and the city of Jalal-Abad¹²¹.

The increased number of HIV positive women and children in newly detected HIV cases indicates the transition of the epidemic from among injecting drug users to the general population.

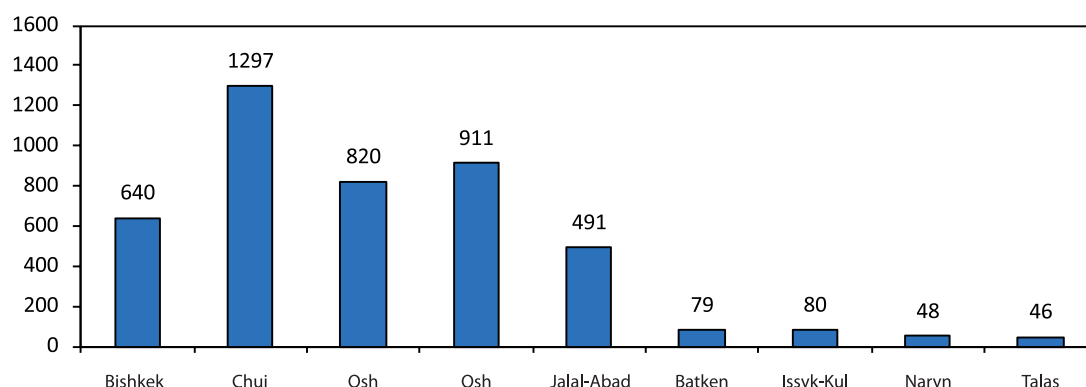
The risk of nosocomial transmission of HIV through transfusion of blood and its components remains. Relatives account for 70 percent of donors and represent the most hazardous category of donors (with 12.1 percent of donors' blood was discarded and disposed of due to positive markers on HIV infection).

With the continued spread of HIV/AIDS and with no expected reverse of the incidence, the likelihood of achieving the MDG targets is low.

The Kyrgyz Republic follows its international obligations – the MDGs (2000), the Declaration on commitment to HIV/AIDS (2001) and the Political declaration (2006) – and is taking major steps to prevent HIV infection. In 2012, the government endorsed the new State Programme on the Stabilisation of the HIV Epidemic in the Kyrgyz Republic, 2012-2016. The Programme suggests measures on prevention, detection, treatment and medical care, with a greater focus on strengthening the health care system and enhancing mechanisms of management, coordination, monitoring and evaluation of the State Programme.

To date, within the scope of implementation of the previous three State Programmes on HIV/AIDS Prevention in the Kyrgyz Republic, clear progress was achieved in a number of important aspects. Donor funding allowed for expansion of the programmes. This led to the introduction of new approaches based on WHO/UNAIDS recommendations and headway to be made in achieving universal access for high-risk behaviour groups and PLHIV to programmes on

Figure 39. Newly Detected HIV Cases by region in 2012



Source: National AIDS Centre

119 Research on gender, sexual and behavioural factors that affect the vulnerability of women to HIV, UNWOMEN, 2003

120 'The report on the main results of the activities of the republican health care institutions in 2012 and the tasks for 2013'

121 Under Decree of the Ministry of Health No. 517 of 25 October 2011

prevention, detection, medical care and support. Sustainable partnerships with governmental, non-governmental and international organizations have been established.

With the support of international development actors (GFATM, DFID, KFW, World Bank, USAID, UNDP, UNICEF, UNFPA, Soros Foundation and AFEW), focused measures have been adopted targeting different at-risk groups¹²². International development assistance represented 90 percent of funds allocated to fighting HIV, of which 50 percent are grants from the Global Fund to fight HIV/AIDS, Tuberculosis and Malaria. State funding of programmes on HIV prevention include only the gross expenditure for the National AIDS Centre and Republican Blood Centre under the Ministry of Health.

The Kyrgyz Republic implements a programme on harm reduction (needle and syringe exchange, methadone substitution treatment, etc) as the strategy for HIV prevention among IDUs, with an extended package of services and widened geographic coverage. The programme covers both the civilian and penitentiary sectors. There were 48 Syringe Exchange Points (SEPs) operating around the country in 2012, with 20 of them attached to Family Medicine Centres, another to NGOs and 19 providing services in penitentiary institutions. At the beginning of 2011, a programme of methadone substitution therapy (MST) was introduced, providing for 1,013 IDUs,

including 119 in the penitentiary system. In 2010, the participants of MST reported positive social changes: 41.3 percent found employment and 12.5 percent started or re-started families.

For the timely prevention of vertical transmission of HIV from mother to child, all pregnant women after receiving written approval should undergo mandatory testing for HIV. In the case of detecting HIV infection, the pregnant women and newborns receive a full course of treatment with antiretroviral drugs (ARV therapy). The National AIDS Centre, with the active support of UNICEF, implements a number of measures aimed at strengthening the capacity of health services and communities on preventing mother-to-child transmission (PMTCT), and developing and revising manuals, training programmes, replicating the informational educational materials, etc. At the end of 2012, the number of pregnant women was 128 and 90 percent of those who delivered in 2012 received ARV therapy.

Antiretroviral therapy was provided to 691 PLHIV as of 1 January 2013, including: 457 adults (248 men and 209 women) and 234 children (155 boys and 79 girls). The ARV drugs were procured with the support of GFATM grants and the antiretroviral therapy was provided to all those PLHIV who needed it, including those in the penitentiary system.

Box 17. Implementation of rapid testing by saliva for HIV¹²³.

In 2012, UNDP in collaboration with national partners, launched a new programme on rapid testing by saliva for HIV. The programme is based on best international practices with the purpose of improving access of vulnerable groups to HIV testing. To implement the programme, UNDP delivered intensive capacity building to 12 NGOs operating in the north and south of the country. During the first three months following the launch of the new rapid testing system, 1,335 persons from high risk groups (IDUs, sex workers and MSM) participated in testing.

The successful integration of rapid HIV testing depends on the coordinated efforts of all stakeholders working in the area of HIV/AIDS. UNDP is working with relevant partners to improve the efficiency of the programme and develop recommendations for the Ministry of Health and National AIDS Centre to increase the number of organizations delivering express tests, both among NGOs and government agencies.

2. Bottlenecks and risks in achieving the Goal

The limited coverage of vulnerable groups by preventive measures poses a serious threat in terms of the increase of HIV prevalence. The needs of population groups at high risk (including IDUs, sex workers, MSM and mobile/migrant populations) are not being fully met. Moreover, the lack of awareness on primary prevention

measures for HIV infection creates another serious risk for the further spread of HIV.

The provision of HIV services remain fragmented and there is a lack of interaction between different agencies and levels of service delivery. A growing number of cases with the parenteral route of

¹²² Country Progress Report on Global HIV/AIDS response. The Kyrgyz Republic, 2012

¹²³ Annual report on the implementation of grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria for 2012

HIV transmission is an indication of inadequate safety of medical procedures. The outbreak of HIV infection in health care organizations of Osh oblast has demonstrated the urgency for measures to be undertaken. The health care personnel lack adequate skills and knowledge on blood safety issues which adds to the risks of nosocomial spread of HIV and also among health workers. The problem also remains as a result of the absence of the necessary medical equipment and tools, including individual protection means for health care personnel. Quality control processes of medical procedures at the hospital level remain weak.

The system of pre-test counseling and testing services is not yet fully developed and integrated into the health system. An evaluation of 2012 revealed poor quality management of documentation on pre-test counseling and testing and a weak system of registration of patients who received preventive treatment.

The prevention of mother-to-child transmission also requires more focused attention and increasing the early prenatal care coverage; 5.7 percent of women come to maternity hospitals without being HIV tested, while prevention measures should start at 14 weeks of pregnancy.

The level of adherence of people living with HIV/AIDS (PLHIV) to

ARV therapy is low. This can be explained by the lack of cooperation between state health care institutions and service NGOs. Health care personnel require regular capacity building aimed at improving the quality of dispensary observation and follow-up activities and proper administration of ARV therapy. Increasing social support and capacity building of PLHIV will help strengthen adherence to treatment among HIV-infected patients.

Favourable conditions have been created in the Kyrgyz Republic for the development of programmes to combat HIV. However, stigma and discrimination are still key barriers that foster inclusion and marginalisation of PLHIV due to limited access to health care and education and social support. The protection of the human rights of PLHIV and population groups at high risk remains a highly sensitive issue in the country and requires attention and further continuous actions.

There are certain signals of reducing volume of the international funding for development programmes for HIV prevention, treatment and care. Allocation of funds for activities on HIV prevention across other sectors is insufficient. However, the establishment of a more sustainable integrated system requires significant funding. Moreover, the system of monitoring and evaluation of the National Programme on HIV/AIDS is weak and requires improvement.

3. Lessons learned

Limited coverage of preventive interventions target groups is a factor influencing the increase in the prevalence of HIV infection.

The relevance of nosocomial transmission of HIV infection has increased considerably, suggesting that there are problems with ensuring the safety of medical procedures.

Inadequate funding, limited geographical coverage of preven-

tion, low efficiency, lack of capacity of service providers and inadequate monitoring and evaluation are factors preventing the stabilisation of the epidemic.

The existing stigma and discrimination by society and health care workers against people living with HIV is a major barrier to the provision of advice, treatment and care.

4. Recommendations

Given the imminent completion of the current GFATM grant, there is a need to attract internal and external funding, including from the private sector, to proceed with anti-malaria interventions.

Cooperation with neighbouring countries in order to completely eliminate malaria in the Kyrgyz Republic is necessary.

HIV/AIDS

Medium-term measures (until 2015)

The integration of HIV/AIDS services in general medical practice must be continued, including at the PHC level.

The capacity of the Republican 'AIDS' Centre must be strengthened in the field of diagnosis, treatment, support of and care for HIV/AIDS patients, as well as in providing technical assistance to the medical staff of other hospitals.

Coverage by the services of harm-reduction programmes should be increased, including methadone substitute treatment



(MST), while the participation of primary health care institutions and promotion outreach programmes need to be increased.

The safety of medical procedures in health care organizations must be strengthened.

Regular training and retraining is needed for health personnel involved in treating and caring for people with HIV/AIDS and managing TB/HIV and PMTCT co-infected patients; and their knowledge and practices updated in accordance with the recommendations of WHO.

The level of commitment of PLHIV to highly active antiretroviral therapy must be increased and social support strengthened to bring it in line with existing health care practices.

High-quality strategic information must be available, including epidemiological surveillance and [M&E] data, and its application in policy development and programme planning must be maximised.

Long-term measures (after 2015)

The relevance of activities in combating the spread of HIV will remain after 2015. The current State programme for the stabilisation of the HIV epidemic in the Kyrgyz Republic provides for the implementation of related activities up to the end of 2016. In subsequent years, a new programme will be developed based on an in-depth analysis of the results of implemented activities to date and trends in the epidemiological situation with HIV in the Kyrgyz Republic.

DRUG ADDICTION

1. Current situation and trends

The Kyrgyz Republic is located on the northern drug trafficking route from Afghanistan to Russia and eastern Europe. During 2009-2012, the drug abuse situation in the Kyrgyz Republic was characterised by an increased use of the country by international drug cartels for drug trafficking to EU countries and Russia. Illicit drug trafficking is one of the key contributors to the continuing increase of drug abuse and drug addiction in the Kyrgyz Republic¹²⁴.

Before 2012, there was an increase of the number of drug-addicted persons (on average by 5.2 percent annually), while that number decreased by 7.5 percent in absolute terms in 2012. Drug use is widespread in all regions of the republic, but 80 percent of registered reside in Bishkek, Osh and Chui provinces.

The use of opioid substances prevails in the Kyrgyz Republic, although cannabis derivatives are also widespread in Naryn, Talas, Issyk-Kul, Jalal-Abad and Batken oblasts. The absolute number of registered opiate users has increased by 21 percent over the last five years mainly due to a 46.4 percent increase of heroin addicts. Men are dominant among drug-users (90 percent). Analysis of the age structure of registered drug users over recent years shows that the number of officially registered persons under 18 years of age decreased by 65 percent in absolute terms.

The Kyrgyz Republic has adopted a 'Concept for preventing the dissemination of drugs and illegal drug circulation to 2015'. The Concept defines state policy on preventing drug addiction, reducing

the demand for drugs and combating the illegal production, supply and circulation of drugs. The country has embarked on a programme of humanisation of the criminal and administrative responsibility; removal of excessive punishments for those with diseases transmitted through injecting drug use with infected instruments; and improved coverage of drug users with preventive programmes. In 1998, the Kyrgyz Republic was the first country in the CIS to introduce harm-reduction strategies for drug users.

The Ministry of Education and the Ministry of Health in partnership with NGOs have been implementing a number of coherent measures on the prevention of drug abuse and spread of HIV among young people. However, there is a lack of well-defined state strategy for the primary prevention of drug abuse to reduce the risk of drug addiction among young people.

Injecting drug use is often associated with HIV infection: according to SS data, the prevalence of HIV infection among IDUs in 2010 was 14.6 percent¹²⁵. The mortality rate among drug users is 1.3 times higher than among the general population. The mortality rate among female drug users is higher than among women in the general population.

In the Kyrgyz Republic, measures on the prevention and care for drug users are conducted through the joint activities of the state and NGOs. Many NGOs have been established to assist drug users, HIV-infected people and sex workers (including by persons who are

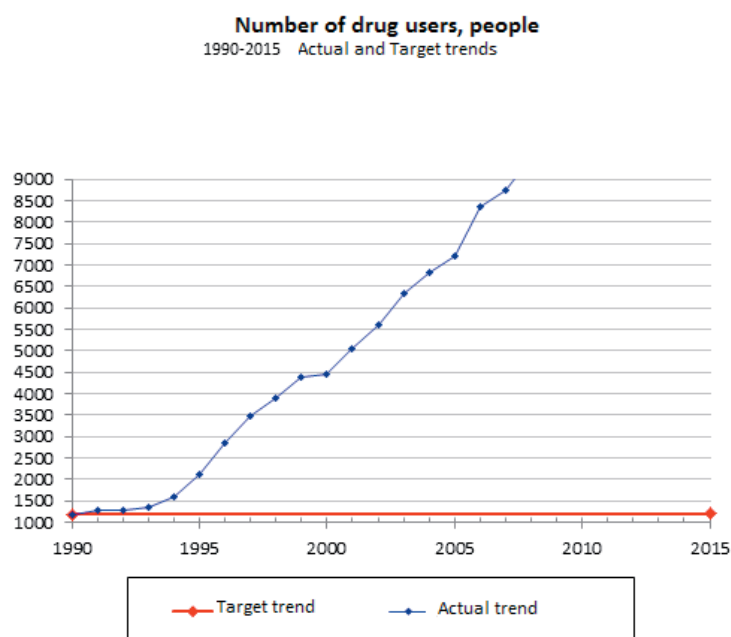
¹²⁴ The National Report on the Drug Abuse Situation in the Kyrgyz Republic. 2012. The State Drug Control Service under the Government of the Kyrgyz Republic

¹²⁵ The SS 2006-2010. Republican AIDS Center

members of those high risk groups). A considerable number of activities are being undertaken with donor support to slow the spread

of drug addiction and to reduce the hazards of drug use. The GFATM is the principal donor supporting national efforts.

Figure 40. Number of drug users and people (1990-2015): Actual and target trends



2. Bottlenecks and risks in achieving the Goal

The location of the Kyrgyz Republic and the subsequent expansion of the market for illegal drugs is a harsh reality. Incomplete implementation of approved documents, insufficient financing, the lack of control over criminal groups with interests in the dissemination of drugs and the reduction of programmes designed to prevent drug addiction among young people all can lead to increased drug use.

There is no national strategy for the primary prevention of drug

abuse. Drug users are becoming younger each year and the significant spread of drug addiction among young people is a particular concern, especially schoolchildren and students, who are the most socially vulnerable segment of the population.

The lack of state funding of measures on secondary and tertiary prevention of drug abuse lead to widespread uncontrolled HIV infection, hepatitis C and other diseases.

3. Lessons learned

A key bottleneck that reduces the efficiency of drug abuse prevention programmes is the absence of the necessary regulatory framework. Moreover, weak support and low commitment to support these programmes at high political level is also significant. Many programmes have a high risk of failure due to underfinancing from the state budget.

Medium-term measures (until 2015)

The State policy on combating illegal drug trafficking must be

improved, including the related legislative and regulatory framework and State control over the development of narcotic and psychotropic substances and their precursors. Without effective mobilisation and coordination of the anti-drug activities of government agencies, local self-government bodies and public organizations, it is impossible to counteract to drug abuse. A comprehensive national strategy for primary prevention of drug abuse should be developed to prevent the further spread of drug abuse among young people.

Further effective harm-reduction programmes are required.

4. Recommendations

Long-term measures (after 2015)

Given the current upward trend in drug abuse and poor government policies in this area, the problem of drug abuse will re-

main relevant after 2015. Countermeasures need to be of a more sustainable nature and an integral part of the overall policy of the State.

TUBERCULOSIS

1. Current situation and trends

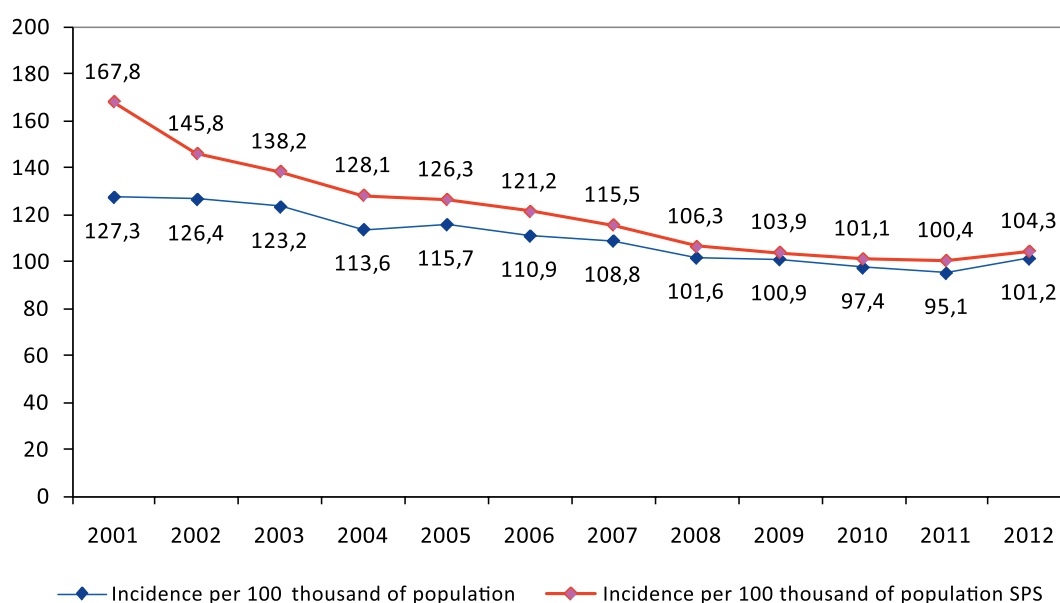
The issue of tuberculosis (TB) prevention and treatment is among the Government of the Kyrgyz Republic's priorities. The country has demonstrated strong political commitment to the implementation of measures aimed at reducing TB morbidity and mortality rates by adopting a number of strategic documents: the Law 'On protection of the population of the Kyrgyz Republic from tuberculosis' and by-laws, the 'Third National TB Control Programme' is based on the principles of the WHO Stop TB strategy, whereby the necessary legal and regulatory framework is created to enhance health and sanitary care for TB patients.

Since 2002, there has been a steady decline in key epidemiological indicators for TB. During the period from 2001 to 2011, the TB incidence rate decreased by approximately 40 percent (from 168 per

100,000 of the population to 102 per 100,000, with newly detected cases falling from 8,266 to 5,535) and mortality from TB fell by 66 percent (from 27 per 100,000 of the population to 9.2 per 100,000, or from 1,329 to 501 deaths). This decrease in incidence demonstrates the achievements of the National TB control programmes in the Kyrgyz Republic. However, overall the current epidemiological situation related to TB in the Kyrgyz Republic is still unfavourable.

The incidence of TB in the country increased in 2012 compared to 2011, from 95 per 100,000 of the population to 101 (5,674 new TB cases in 2012 compared with 5,243 in 2011). As in previous years, the incidence prevails in Bishkek city and Chui oblast (118 per 100,000 of the population and 144 per 100,000). The incidence of TB remains high in prisons, with 2,293 newly registered cases. Men

Figure 41. Dynamics of incidents of TB in the Kyrgyz Republic, 2001-2012



Source: Republican Medical Information Center, National TB Center

are dominant among TB patients compared to women, largely due to men's high risk behaviour.

The rate of TB among children also increased in 2012 from 2011, reaching 37.2 per 100,000 of the population (from 30.1 per 100,000 in 2011). The highest concentration was in Bishkek city and Chui oblast (76.5 per 100,000 of the population and 47 per 100,000 respectively). The incidence of TB among adolescents also increased over the same period, from 79.9 per 100,000 of the population to 93.1 per 100,000, due to the significant growth of this indicator in Chui (from 113.4 per 100,000 of the population to 176.4 per 100,000) and Batken oblasts (from 65.7 per 100,000 of the population to 107.6 per 100,000).

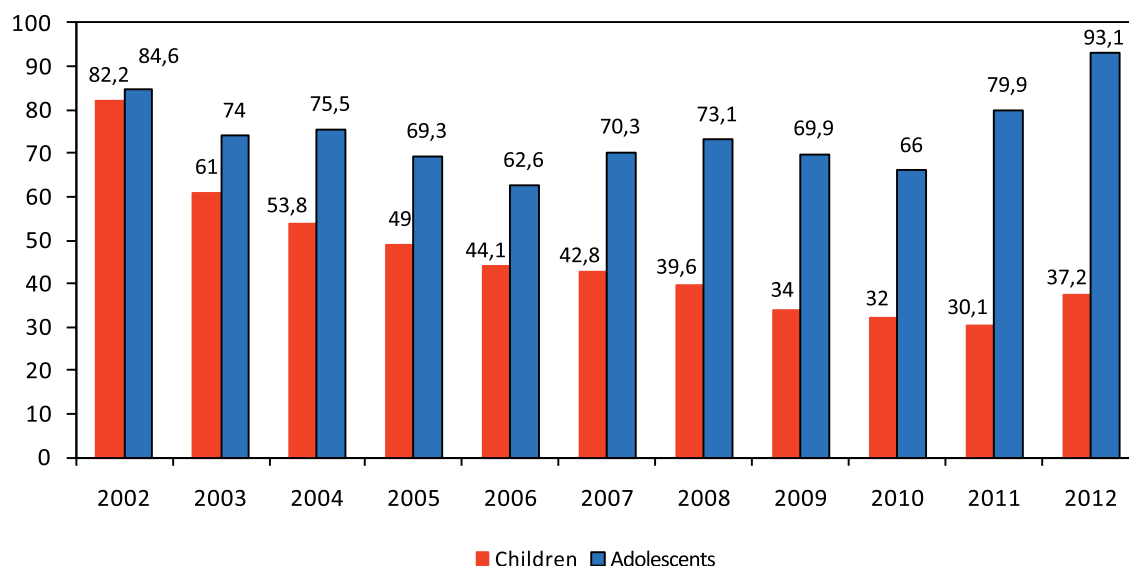
In the Kyrgyz Republic, the rate of extra-pulmonary TB of newly diagnosed patients is 30 percent. This may occur due to the low quality of diagnosis of pulmonary TB and identification, or may reflect the dissemination of bovine TB resulting from high levels of TB incidence among pets.

The death rate from TB shows a steady decline; 80 percent of deaths are among patients with chronic forms of the disease. In

2012, the TB mortality rate was 8.6 per 100,000, with the highest rate reported in Chui and Naryn oblasts (13.6 per 100,000 of the population 12 per 100,000 respectively). There was a particularly high growth of TB deaths reported in prisons; from 247.5 per 100,000 of the population to 401.6 per 100,000.

The Kyrgyz Republic has a high rate of multidrug-resistant TB (MDR-TB). In 2012, according to WHO data¹²⁶ the proportion of MDR-TB among new cases is 26 percent and 52 percent in previously treated patients. Multidrug-resistant tuberculosis is the result of improper treatment of TB and poor infection control in health care facilities¹²⁷. Despite the current low coverage of testing for resistance to TB drugs (29.2 percent¹²⁸), every year the incidence of drug-resistant cases of TB is growing and the number of confirmed cases of MDR-TB during the period from 2005 to 2011 amounted to 1,963. It is expected that the development of clinical guidelines on the treatment of MDR-TB, registration of all second-line drugs and the development and implementation of an electronic drug management system will have a positive impact on improving detection and coverage of all identified patients with MDR-TB.

Figure 42. Incidence of TB in children and adolescents, 2002-2012 (per 100,000 of the population)



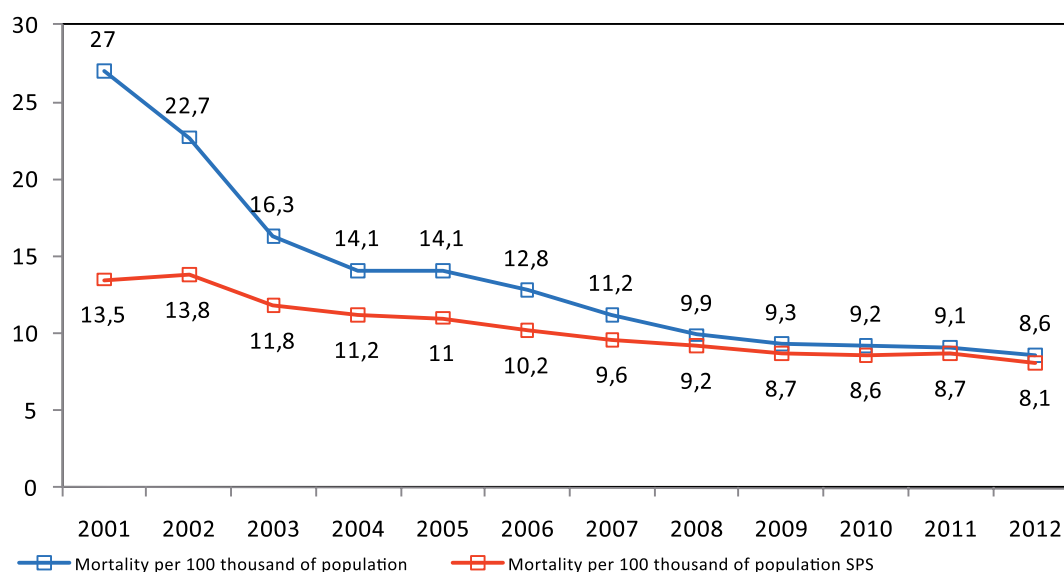
Source: Republican Medical Information Center, National TB Center

126 Global TB Report. WHO. 2012

127 The Road Map on Prevention and Control of MDR-TB, WHO. 2011

128 The 'Den Sooluk' Programme Indicators for 2012-2016

Figure 43. Dynamics of mortality caused by TB in the Kyrgyz Republic, 2001-2012



Source: Republican Medical Information Center, National TB Center

Box 18. Infection control measures in primary health care

As part of the pilot USAID programme 'Quality Health Care' measures recommended by WHO are implemented to reduce the transmission and spread of airborne diseases, including TB at FMCs of Issyk-Ata and Sokuluk rayons of Chui oblast, the FMC of Jety-Oguz, Ak-Suu, Ton rayons of Issyk-Kul and FMCs of Bazar-Kurgan and Suzak rayons of Jalalabad oblast. Infection control measures included:

- Training of health providers on infection control and infection control plan development;
- The system of grading and separating the flow of patients with coughs and rapid inspection and examination of such patients in order to protect visitors from the risk of infection;
- Information on the rules of conduct when coughing (e.g. shielding the mouth and nose when coughing and sneezing);
- Using natural ventilation, UV lamps and the means of personal protection of medical workers (respirators).

These basic but effective measures ensure the safety of other patients from the risk of TB infection, and also improve vigilance to detect TB.

Source: Ministry of Health of the Kyrgyz Republic. 2013

The current health sector reform programme 'Den Sooluk' is aimed at strengthening the integration of TB control at the level of primary health care and improving the quality of care and treatment. The programme identifies the following priority areas for 2012-2016: implementation of TB infection control measures in health care institutions and TB facilities; improving the quality of detection and laboratory diagnosis of TB, including MDR-TB; and the introduction of an outpatient TB treatment model. In general, every effort is being made to increase the efficiency of the existing TB care system. The planned restructuring of TB hospitals will help to save

money and re-allocate funding to cover the highest priority areas of TB control.

The Kyrgyz Republic has launched new GeneXpert MTB/RIF technology (effective from 2011): the rapid diagnosis of TB and determination of resistance to rifampicin¹²⁹. This equipment will help to improve the quality of diagnosis. By 2013, the country had established eight GeneXpert MTB/RIF points in Bishkek, Chui and Osh oblasts. The National Reference Laboratory of modular type will be launched in 2013 and this step will bring the quality of laboratory-based TB diagnosis to a higher level.

129 Rifampicin – antimicrobial drug with the highest effectiveness in treating TB

Box 19. Improving the quality of care to TB patients and the standardisation of health services

One reason behind the low efficiency of the health system in identification, diagnosis and treatment of TB is the outdated norms and standards of TB care, which have hardly been updated to account for the latest evidence-based and effective approaches to detect and treat TB. In 2012, the Ministry of Health approved four clinical guidelines on TB, incorporating the latest recommendations: the organization of TB control at primary health care level, paediatric TB, TB infection control and management of drug-resistant tuberculosis.

The latest recommendations include the revision of current approaches to screening for TB among the general population and vulnerable groups, priority treatment of TB in outpatient settings, the mandatory introduction of TB infection control measures, improving standards of diagnosis and treatment of paediatric tuberculosis and others. It is expected that the mainstreaming of these standards and their implementation will result in a positive impact on the detection, diagnosis and outcomes of TB treatment in the country.

Source: Ministry of Health of the Kyrgyz Republic. 2013

The GFATM supplies 98 percent of TB drugs through its grants: drugs for treatment of TB are supplied to the country in sufficient quantities, in most cases without delays and disruptions. Special attention has been paid to the establishment of the supply and distribution chains, transportation and storage of TB drugs. GFATM funds have enabled warehouses in regional centres for TB control to be renovated and for implementation of Ministry of Health approved standard operating procedures for drug management.

The provision of MDR-TB drugs to the country has become a major challenge. The country experiences a critical shortage of MDR-TB drugs and the health care system cannot accept all MDR patients for treatment. It is expected that the development of new clinical protocols for the management of MDR-TB, improvement in the registration of second-line TB drugs and the introduction of electronic registration of all cases of TB will have a positive impact on the timely start and quality of MDR-TB treatment.

The combination of HIV and TB in the Kyrgyz Republic has not yet been studied in full, due to the lack of routine data and research on the subject. By 2011, there were 672 cases of HIV/TB diagnosed, including 152 cases of HIV/TB identified in 2011. During the same period 257 HIV/TB patients died. The poor co-ordination and interaction between TB and HIV services do not allow evaluation of the actual prevalence of HIV infection among TB patients.

An important component of the current TB control programme is the more active involvement of other sectors and civil society. With technical support from WHO and USAID, a strategy for advocacy, communication and social mobilization (ACSM) was developed, together with an action plan. The implementation of this strategy will improve the involvement of different structures in TB control activities, to promote high-level political priorities in the TB control programme.

Box 20. Key challenges associated with MDR-TB in prisons

Tuberculosis incidence in the penitentiary system is a critical challenge for the country. The Kyrgyz Republic's accession to the WHO project 'Health in Prisons' in 2003 was to establish comprehensive collaboration between prison and civil health care services. However, despite the significant inflow of donor funds, efforts to improve the situation were fragmented and the overall situation in prison health care has not undergone significant changes.

In the structure of morbidity of prisoners, TB is as prevalent as before. With the support of international organizations such as the International Committee of Red Cross (ICRC) and Doctors without Borders-Switzerland (MSF-S), major efforts are being made to improve TB diagnosis and treatment.

2. Bottlenecks and risks in achieving the Goal

The major interventions in the area of TB control and treatment are dependent upon international development assistance, with GFATM as the major donor. The grants are used for the supply of first and second line TB drugs, procurement of equipment, supplies and reagents, capacity building and strengthening monitoring and TB control. Any reduction in donor funding for TB will put progress at high risk.

The deterioration of the socio-economic situation, high poverty levels, large volumes of internal and external migration, limited access to health care services (especially among risk groups such as prisoners, ex-prisoners, IDUs, migrants, etc.) and stigma and discrimination will all have an adverse effect on the prevention of TB. Evidence of these factors is the high incidence of TB in Bishkek and Chui oblasts which have a large number of internal migrants and high concentration of correctional institutions.

The weak interaction between health care services, the penitentiary system and the civil sector will continue to threaten the provision of treatment to ex-prisoners. Experience of delivering continuous social support programmes for these patients during treatment showed a positive impact on the treatment outcome. However, the lack of state funding for these activities aggravates the risks of interruption of services.

The problem of non-compliance with the standard scheme of TB treatment, violations of the treatment pattern and the use of low-quality TB drugs can further aggravate the situation with MDR-TB in the country, and even worsen the situation with extensively drug-resistant tuberculosis (XDR-TB). Non-compliance with infection control measures in primary care organizations and TB hospitals may be another reason behind the further spread of MDR-TB and development of XDR-TB.

3. Lessons learned

Over recent years, the Kyrgyz Republic has been successful in developing and testing a number of effective TB control programmes. Unfortunately the sustainability of these efforts is questioned and

has not been translated into sustainable institutional development. The donor-driven programmes need a greater focus on systemic changes rather than concentration on individual processes.

4. Recommendations

Medium-term measures (until 2015)

The implementation of international TB care standards must be enhanced through institutionalization of recommendations in the operation of general health care services, including PHC, TB and other services.

Coordination and supervision of the implementation of the National TB Programme must be reinforced, with much clearer delineation of roles and responsibilities on implementation, supervision, monitoring and evaluation.

Prioritisation of the outpatient model of treating TB patients, as an effective approach in terms of costs and safe in terms of prevention of nosocomial infections of resistant TB, must be reinforced. The outpatient model will enable substantial public funds to be saved and redirected towards procurement of TB drugs and consumables for laboratory diagnosis, i.e. those areas which are currently dependent on the funding from international organizations. Implementation of infection control measures should be a priority in the organization of TB care.

The system of recording and reporting of TB cases must be improved to make it more transparent and of higher quality. The planning of drugs and other essential resources for organization of effective TB care depends on accurate and correct data. The involvement of the Department of State Sanitary and Epidemiological Surveillance (SES) in national data collection and analysis will help in improving the situation.

Intersectoral liaison in organizing TB control must be strengthened.

Long-term measures (after 2015)

After 2015, TB will continue to be a priority. However, the organization of TB control should be under the public system of implementing essential activities (this does not imply the disbursement of large funds from the budget, rather the rational distribution and use of public funds).

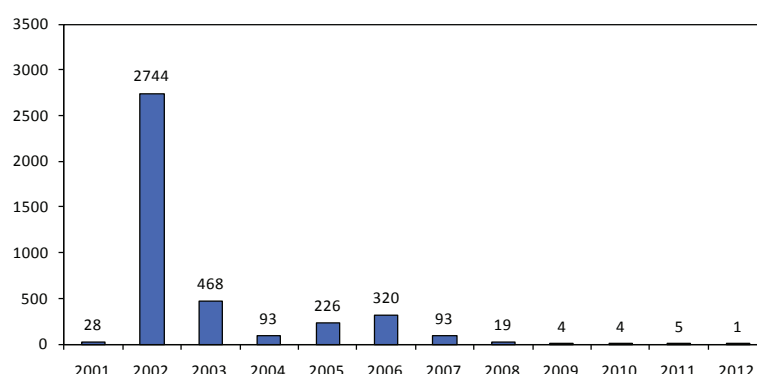
MALARIA

1. Current situation and trends

In recent years, epidemics and outbreaks of malaria were registered in the southern and northern regions of the country. The epidemics occurred in the south in 2002 and created a serious problem for the region (there were over 2,700 cases registered). From 2003, there was a decrease in the incidence of malaria and in 2007, there were only 96 cases registered in the whole country. However, the dynamics remain unstable, since in 2005 and 2006, the number of cases were significantly higher than in 2004 (2.3 times higher in 2005 and 3.2 times

higher in 2006). During the period under review, the highest rate was recorded in 2006 in Bishkek, with 16.6 cases of malaria per 100,000 citizens. This can be explained by the destruction of irrigation systems and the construction of new residential areas in marshlands near the city. The number of malaria cases, as well as the number of cases per 100,000 of the population declined annually until 2010. Since 2011, there has been no reported endemic malaria case in the country, with high expectations of the MDG target being achieved.

Figure 44. Number of Registered Cases of Malaria in the Kyrgyz Republic (2001-2012)



Source: National Statistical Committee of the Kyrgyz Republic

Within the regional strategy 'From combating to eradication of malaria in the European region of the WHO for 2006-2015'¹³⁰ adopted by the Kyrgyz Republic, there is a commitment to implement all possible measures to fight malaria epidemics. The Government of the Kyrgyz Republic, with technical assistance from WHO, GFATM, USAID, ACTED and other development partners, developed the National Strategic Plan 2000-2005 to combat malaria based on a multispectral approach. The strategic plan included activities for key ministries and agencies to combat malaria, as well as the development of partnerships with civil society and international organizations.

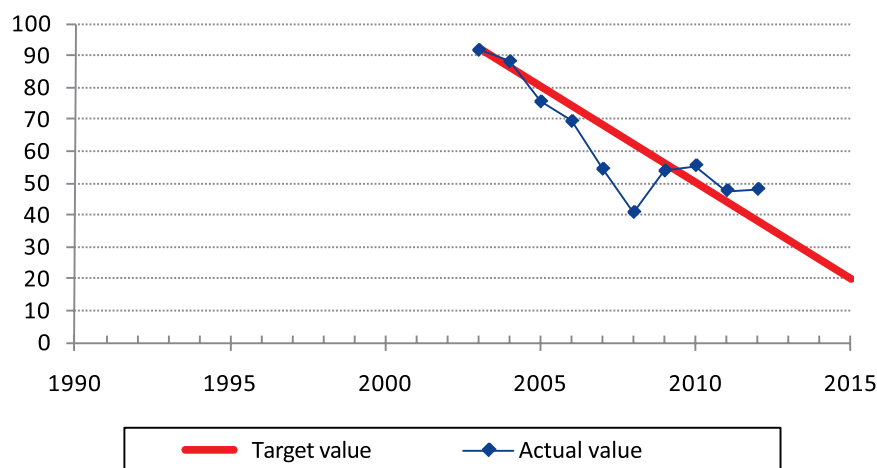
Since 2010, the next phase of the 'Program of elimination of malaria in the Kyrgyz Republic 2011-2015' has been implemented. Financial support through GFATM helped the Ministry of Health to ensure sustainability of efforts towards overcoming malaria in the country. The package of interventions included establishing of public policy, development of methodology, information and educational materials, delivering capacity building, procurement of equipment

and increasing awareness and attitudes towards the problem. With GFATM support it has been possible to conduct consistent activities to combat malaria. Thus, during 2006-2011 training was provided to 3,355 managers of health care organizations on issues related to malaria, as well as to primary health care staff and parasitic laboratory workers, of which over 80 percent have been trained under the Global Fund. All laboratory experts (810 people) have been trained to diagnose malaria, while 380 laboratories (89.2 percent of the total number) have been equipped with the support of GFATM. Furthermore, mobile groups created with the support of GFATM, provide guidance and practical assistance to experts at the local level.

The basis for the organization and scope of preventive activities is to study and map the areas, according to a WHO geographical information system. A network of electronic communication with regional governments can continuously monitor the epidemiological situation and plan emergency measures to contain outbreaks. Protective activities include the provision of impregnated mosquito nets,

130 <http://www.euro.who.int/document/e88840r.pdf>

Figure 45. Proportion of children under 5 years of age sleeping under insecticide-treated bed nets (1990-2015): Actual and target values



Source: National Statistical Committee of the Kyrgyz Republic

Box 21. Implementation of the 'Developing partnerships and community involvement in efforts to eliminate malaria in the Kyrgyz Republic' Strategy

The 'Developing partnerships and community involvement in efforts to eliminate malaria in the Kyrgyz Republic' strategy has been implemented in collaboration with Village Health Committees and regional departments of the National Centre for Health Promotion in Batken, Jalal-Abad, Osh and Chui oblasts, as well as in residential areas of the city of Bishkek. The interventions were funded through GFATM grants. Engagement of village health committees in the processes of malaria control in disadvantaged communities helped to consolidate the efforts of state institutions and civil society.

Community members formed the groups to help processing premises and distribute bed nets. In addition, community members served as agents for the exchange of information about malaria threats and helped villagers to build skills to combat malaria and use protective equipment.

the interior indoor spraying, handling anophelogenous reservoirs and the promotion of a biological method to combat the mosquito larvae. Thus in 2012, measures to combat malaria were carried out in 34 territorial administrative units of the health system, in all endemic areas and regions of the country. A total 20,000 households were processed and 35,000 bed nets distributed. The priority in bed net distribution was for the families with pregnant women and children

under 5 years of age. Bed net distribution coverage for pregnant women and children under 5 years of age was 81.6 and 58.9 per cent respectively (see Figure 44).

Community engagement in the implementation of preventive measures played an important part in sustaining development efforts (see BOX 5 below).

By 2014, Kyrgyzstan is preparing to pass the international certification of a malaria-free territory.

2. Bottlenecks and risks in achieving the Goal

The specific landscape and climatic conditions of the Kyrgyz Republic make it a malaria prone area, caused by the presence of significant anophelogenous areas, conducive temperature conditions and rice fields. Furthermore, there are threats of epidemic outbreaks in transboundary areas requiring the continuous implementation of joint programmes with neighbouring countries (Tajikistan and Uzbekistan).

The establishment of a comprehensive sustainable system to fight malaria has provided a solid foundation for the delivery of preventive and therapeutic measures in health care facilities and at the community level. However, interventions are dependent on external financing, particularly through GFATM grants.

3. Lessons learned

The success of effective measures to combat malaria are depended on the availability of a comprehensive national plan with sufficient financial inputs from the state budget and from the in-

ternational donor community, and consolidation and coordination of efforts of various government agencies, civil society and international partners.

4. Recommendations

Medium-term measures (until 2015)

Given the imminent end of the current grant of GFATM there is a need to raise funds from internal and external funding sources, including the private sector, for further implementation of antimalarial activities.

Intensive cooperation with the neighbouring countries must continue to contain, maintain and ultimately eliminate malaria from the Kyrgyz Republic.

Long-term measures (after 2015)

Taking into account the specific features of the landscape and climatic conditions of the Kyrgyz Republic, the need for malaria preventive interventions will continue after 2015. This will require the development of a new National Plan on malaria for the coming years, including the issues of inter-sectoral cooperation, ensuring awareness on malaria prevention and promoting malaria-related vigilance among health workers.

BRUCELLOSIS

1. Current situation and trends

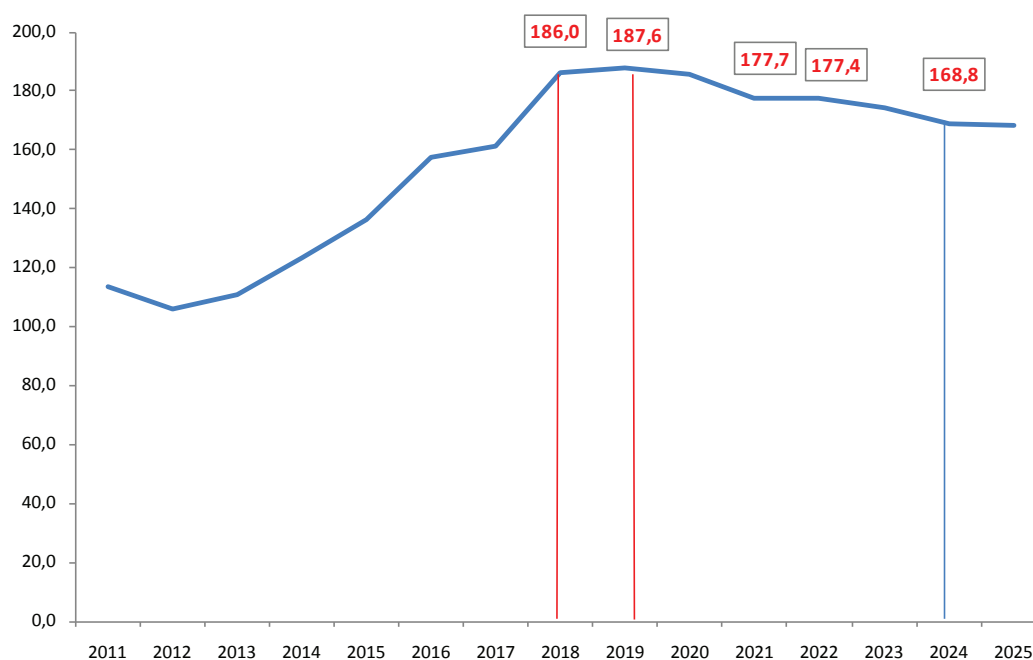
The persistently high level of brucellosis in the Kyrgyz Republic is a matter of serious concern. There was an upward trend in the incidence of brucellosis during the period of 2009-2011 and the average growth rate over this period was 20 percent. In 2012, there was a sharp decrease in the incidence of brucellosis (2,141 cases of human disease were reported compared to 4,223 cases for the same period in 2011). In 2012, there were 224 reported cases of brucellosis among children in 2012 compared to 563 for the same period in 2011. A twofold decline in the number of family cases was reported. In 2011, the number of households experiencing the disease was 131 (with 289 people), while in 2012, the number of family cases fell to 63. During the first quarter of 2013, there were 282 cases registered compared to 447 cases for the same period in 2012.

In 2012, there were 953,640 head of cattle surveyed and 2,472

(0.3 percent) diagnosed with brucellosis. Another 34,335 small cattle were screened, of which 215 were killed because of a positive result.

Small ruminants' vaccination campaign began in 2009 in Naryn oblast, with subsequent coverage of Chui and Issyk-Kul oblasts in 2010. Since 2011, all regions of the country have been covered by the conjunctival vaccination MRS strain REV-1. This was followed by a comprehensive information and awareness raising campaign that targeted vulnerable communities and involved different information channels. It is important to note that national bacteriological laboratories performing the diagnostics of brucellosis have full operational capacity: for example, the bacteriology laboratory of the National Center for Quarantine and Especially Dangerous Infections has been able to introduce serological diagnosis of brucellosis according to international standards, which improved access to effective diagnosis.

Figure 46. The incidence of brucellosis for 2000-2012 (intense rate of 100,000 population)



Source: National Statistical Committee of the Kyrgyz Republic

Box 21. The success of the programme to combat brucellosis in the Kyrgyz Republic

The World Bank project 'Agricultural Investments and Services Project (AISP)' has been implemented since 2009, with the aim to prevent and control brucellosis in the Kyrgyz Republic. This programme demonstrated a comprehensive approach to addressing the problem of brucellosis and included the vaccination of small ruminants, an information and education campaign on the prevention of brucellosis and public education through the mass media. The programme focused on close engagement of local governments and communities to address the threat of disease.

Source: The Ministry of Health of the Kyrgyz Republic

2. Bottlenecks and risks in achieving the Goal

The major difficulties in the prevention of brucellosis are the loss of the animal vaccination system, the lack of control and surveillance of animal health and inadequate financing. An underdeveloped legislative and regulatory framework aggravates early identification and timely culling of sick animals. This can lead to an increased incidence of brucellosis among both animals and humans.

Another problem is a shortage of veterinarians in rural areas and the impossibility of having veterinary specialists on small farms. Low levels of awareness about brucellosis prevention have been observed in many rural areas, which may lead to an increased incidence of the disease. High poverty levels in rural areas make it difficult for residents to take brucellosis protection measures.

3. Lessons learned

The sustainability of the achieved results requires consistent improvement of control and surveillance of animal health. The real prevalence of brucellosis in the country is still not well-understood, and can be aggravated in a very short period of time in the absence of appropriate prevention measures.

There are effective programmes to reduce the risks of morbidity and mortality from brucellosis that need gradual integration into the state system of financing and with a more systemic approach. The absence of a proper regulatory framework complicates the efforts and decreases the efficiency of development efforts.

4. Recommendations

Medium-term measures (until 2015)

- The issue of remuneration to the public to compensate for sick animals must be addressed;
- Funds must be allocated for construction of sanitary slaughter houses;
- Facilities must be constructed or the old meat processing plants utilized for the large-scale slaughter of animals with brucellosis;

- A programme should be designed to verify the validity of recording of sick animals and people: to select the pilot oblast (rayon) to study morbidity; and to establish the multidisciplinary team (health workers and veterinarians) for laboratory testing and examination of humans and animals.

Long-term measures (after 2015)

- The sustainable institutional functioning of effective programme-based activities is necessary.



GOAL 7.

ENSURE ENVIRONMENTAL
SUSTAINABILITY



Goal 7

Ensure environmental sustainability

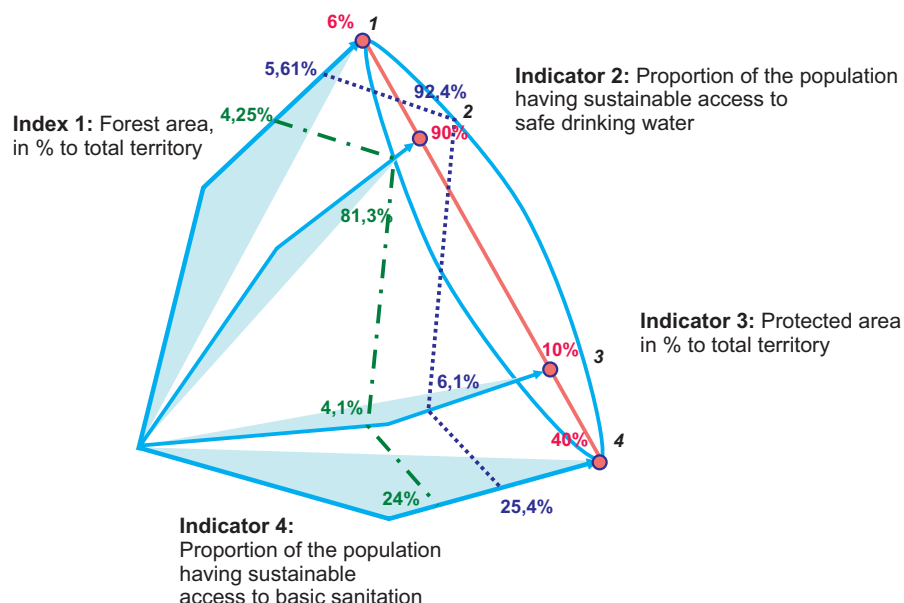
TARGETS

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

halve the proportion of people without sustainable access to safe drinking water

ensure significant improvement in the housing conditions of the population

Figure 47 – Dynamics of MDG achievement indicators



1. Current situation and trends

Social-economic development in the Kyrgyz Republic is based to large extent on consumption of natural resources, hence there is an urgent need for a transition to sustainable development and rational use of resources. The need to protect the environment for future generations is understood by the majority of the population, however it is not a behavioural imperative at the individual level or the level of economic entities. State structures tend to declare high environmental standards but at the same time some requirements to simplify business procedures aimed at creating a more favourable business environment, do not take environmental concerns into consideration.

In 2012, the Kyrgyz Republic was ranked at 101st in the Environmental Performance Index¹³¹ (and highest among central Asian countries). However, the Kyrgyz Republic was in 127th position in the Pilot Trend EPI Rank, related to performance in the management and protection of natural resources, a decline over recent years.

The Kyrgyz Republic is characterised by quite severe natural conditions and high vulnerability of the mountain ecosystems. The prevalence of the unhomogeneous landscape determines the specific conditions of life in the foothills, plains and valleys where settlements and much of the industrial and agricultural production are concentrated. According to bio-climate mapping, about 4 million people (79 percent of the population) live on 17 percent of territory considered to be comfortable for living; about 1 million people live on 19 percent of territory of relative or compensated comfort, at the altitude of 1,500-2,200 meters above sea level; 2 percent of the population live at an altitude of 2,200 meters above sea level under extreme bio-climate conditions. A high concentration of the population and of production is located in areas at risk of natural disasters and catastrophes, hence there is a need to increase environmental sustainability.

131 <http://epi.yale.edu/epi2012/countryprofiles>



Box 22. Air pollution

On the basis of meteorological factors, regions of the Chui valley, Bishkek and Osh cities are characterised by a high potential for ambient air pollution (climatic capacity for atmospheric pollution = 3.4-3.6) and low self-purification ability. Therefore, even insignificant hazardous emissions can cause high rate of air pollution, especially during winter. A high proportion of the urban population is exposed to pollution exceeding permitted norms of air quality (58.7 percent). The rate of air pollution in Bishkek is stable with regard to various monitored substances, including the number of days in which the maximum permitted concentrations are exceeded annually, for example, related to formaldehyde – up to 299 %. The highest rate of pollution is observed in the center of the city, in proximity to main streets. Increased air pollution has a negative impact on human health and ecosystem sustainability, leading to additional health costs.

Source: The National Report on Status of Environment of the Kyrgyz Republic for 2006-2011

Since 2005, all national strategic documents have been designed with the inclusion of environmental issues as one of the major development priorities.

The fundamentals of the national policy on environmental protection and rational use of natural resources are outlined in the Concept of Environmental Security of the Kyrgyz Republic (the Concept)¹³², where key ecological problems that threaten environmental security, social-economic development and human health are identified, together with principles, measures and mechanisms on their mitigation and prevention until 2015¹³³. Issues of environmental security were also integrated into the priorities of country development in the Concept of National Security of the Kyrgyz Republic.

The National Sustainable Development Strategy of the Kyrgyz Republic for 2013-2017¹³⁴ considers environmental protection and promotion of 'green' technologies as a development priority. In the Programme on Transition to Sustainable Development of the Kyrgyz Republic until 2017, different areas of environmental protection were analysed, reflecting ecological and climate change aspects as cross-cutting issues.

The Concept¹³⁵ and Programme on Sustainable Development of the Environmental-economic System 'Issyk-Kul'¹³⁶ are being implemented to conserve the unique ecosystem of Issyk-Kul Lake. The Concept and Programme anticipate development of Issyk-Kul oblast as the ecosystem where high quality of the environment, economic growth and growth of wellbeing of the population are ensured.

The fundamentals of the state policy on development of the forest ecosystems are defined in the Concept of Forestry Development until 2025 and the National Forestry Programme until 2015.

In consideration of the new challenges and problems related to global climate change, the Coordination Commission on Climate Change problems was established¹³⁷ and the draft National Strategy on the country's adaptation to climate change was elaborated. The State Agency of Environmental Protection and Forestry elaborates the draft National Strategies and Action Plans on Biodiversity Conservation in line with implementation of the commitments of the Convention on Biodiversity Conservation¹³⁸.

Box 23. Gender dimension in sustainable development process

It is crucial to take into account the gender dimension in sustainable development issues in order to prevent inequality. Key elements are: the gender dimension in labour, access to natural resources and participation in planning and decision-making. A lack of gender balanced access to natural and social resources in the context of climate change can among the other factors contribute to the increase of social conflicts⁹. Wherein, traditionally, women show a strong initiative in conflict prevention and recovery activity, but they rarely are involved in decision-making, particularly in the emergency response and law-enforcement structures. In 2010, women accounted for 47.1 percent of the employed population, but only 32.4 percent of managers at all levels.

Source: Analytics of preliminary study to prepare the draft Strategy on Climate Change Adaptation of the Kyrgyz Republic

132 Decree of the President of the Kyrgyz Republic as of 23 November 2007

133 Decree of the Government of the Kyrgyz Republic as of 23 September 2011, № 599

134 Decree of the President of the Kyrgyz Republic as of 21 January 2013, № 11

135 Decree of the President of the Kyrgyz Republic as of 10 February 2009, № 98

136 Decree of the Government of the Kyrgyz Republic as of 8 May 2009, № 281

137 Decree of the Government of the Kyrgyz Republic as of 21 November 2012, № 783

138 Analytics of preliminary study to prepare the draft Strategy on Climate Change Adaptation of the Kyrgyz Republic



It is important to recognise a positive trend in the reflection of issues of sustainable development in the 'non-ecological' sector strategic documents and policies. Thus, 'The Mid-term Strategy of Electric Power Development of the Kyrgyz Republic for 2012-2017' includes both targets towards sustainable development and specific tasks aimed at developing a policy of energy saving and promotion of renewable sources of energy. However, limited public financing of measures for environmental protection and sustainable development is still a serious problem for the country. Analysis conducted by the United Nations Economic Commission for Europe (UNECE)¹³⁹ revealed that the policies and plans elaborated in previous years have not been implemented to a large extent because of financing shortfalls.

According to the Law 'On state budget of the Kyrgyz Republic for 2012 and forecast for 2013-2014' the budget allocations for environmental protection in 2012 were 9.7 percent below the level in 2011 and constituted 0.1 percent of GDP or 0.4 percent of the total state budget.

In order to provide access for government institutions as well as the general population to objective and reliable analytical information on the status of the environment, The National Report on Status of Environment of the Kyrgyz Republic during 2006-2011¹⁴⁰ was prepared in 2012, taking into account the international standards and requirements.

As was stated above, to improve the effectiveness of inter-sectoral coordination on climate change issues, the Government of the Kyrgyz Republic established the Coordinating Committee on Climate Change, chaired by the Deputy Prime Minister. The establishment of this mechanism will improve the integration of climate change at the national and sectoral levels. Following the decision of the Committee in February 2013, the Ministries of Energy and Industry, Agriculture

and Land Reclamation, Emergency Situations and the State Agency for Environmental Protection and Forestry were tasked with designing sectoral programmes for adaptation to climate change.

The government will soon finalize the strategic document that determines the priorities for the Kyrgyz Republic on climate change adaptation by 2017. The principal objective of this document is to identify key directions of evaluation and resource mobilisation to minimise the negative impact of climate change, as well to exploit its potential for sustainable development through the implementation of adaptation measures in the most vulnerable sectors of the economy.

Forested areas

Activities related to forestation and increasing the territory of protected areas stipulate the enhancement of factors mitigating climate change effects. As at 1 January 2011, forested areas accounted for 111,656 thousand hectares or 5.61 percent of the overall territory of the country¹⁴¹. 846,500 hectares of land were surveyed during forest management activities and 85,600 hectares during land management works. There were 184,500 hectares not yet investigated. Jalalabad oblast has the largest area mostly covered by forest (1.9 percent of total area of the country) with Chui oblast, the least (0.22 percent of the total area).

In the Kyrgyz Republic, about 90 percent of forests are located at an altitude of between 700 to 2,500 metres above sea level, and protected according to the Forest Code of the Kyrgyz Republic. There are four main types: walnut-fruit, spruce, juniper and flood-plain mixed forests. The broad-leaved forests, walnut-fruit, pistachio and almond forests, which mainly grow in the areas with high population density experience the most anthropogenic pressure. Effective activities on their rational use, reproduction and protection have a significant influence on the poverty rate, in particular, in rural area.

Box 24. Importance of water-control forests of the Kyrgyz Republic

Forests are the most common ecosystems on the earth and the natural sink of carbonic acid (gas) in air, an excess of which leads to climate change. In the Kyrgyz Republic, the forests have great ecological importance. Growing on mountain slopes, forests prevent mudflows, landslides and avalanches, and regulate water flow in rivers. The water regulation benefits of forests are vital for the Kyrgyz Republic and other central Asian countries where crop cultivation is based on irrigation.

Source: The National Report on Status of Environment of the Kyrgyz Republic during 2006-2011

¹³⁹ Assessment of effectiveness of environmental activity. Kyrgyz Republic. Second Review, UNECE, 2009

¹⁴⁰ National Report on Status of Environment of the Kyrgyz Republic for 2006-2011; was approved by the Decree of the Government of the Kyrgyz Republic as of 7 August 2012, № 553

¹⁴¹ National Forest Inventory of the Kyrgyz Republic (the Decree of the Government of the Kyrgyz Republic as of 26 July 2011, № 407)



The Kyrgyz Republic experiences a trend of forest ageing, most typical with spruce forests. Strategic forestry policies have been elaborated to include environmental and social aspects of forest management and take into account mitigation of the effects of climate change. According to national documents on forestry development, the annual volume of reforestation works in state-owned forests has been identified as up to 1000 hectares. For example, forest plantation covered 1,298 hectares in 2012 (and 1,616 hectares in 2011). Nurseries on 31.7 hectares of land were organized to produce the planting stock for trees and shrubs and establish commercial plantations of the fruit, walnut and fast-growing species.

There are a number of projects that complement the efforts of the government: the UNDP-UNV 'Restoring riparian forests of Kyrgyzstan' project, the JICA 'Support to the joint management of forest resources in the Kyrgyz Republic' project and in collaboration with the Global Environmental Facility (GEF), the government launched the 'Sustainable management of mountain forests and land resources of the Kyrgyz Republic in the conditions of climate change'.

However, in 2011, due to the failure of the governments of the beneficiary countries to meet basic requirements the regional (the Kyrgyz Republic and Kazakhstan) World Bank and GEF Project 'Development of the Tien Shan' approved in 2010, was closed. The project was aimed at afforestation of 13,950 hectares of territory in the Kyrgyz Republic, as well as the sale of emission reduction certificates for 192,000 tons of CO₂ by 2014, and 200,500 of CO₂ by 2017 (before the expected closure of the BioCarbon Fund). The combination of forest regeneration and attracting of carbon finance could have become catalytic in increasing the forest area and reducing poverty in rural areas. The situation with this project demonstrated a lack of consistency in the countries' policies on attracting donor funding, including poor assessment of the requested projects and a lack of political will in the performance of previous commitments.

The current share of forested areas is 5.61 percent, close to the target of 6 percent. However, the achievement of the target will only be possible if the government assure sustainable forest management of the existing forested areas.

Protected areas

The protected areas (PAs) play key role in the conservation of biological diversity in the Kyrgyz Republic. The PAs are sites with unique or other valuable natural complexes and with special eco-

logical, scientific and aesthetic significance. The government established the protection and utilisation regime for PAs. At present, a network of PAs is functioning in the Kyrgyz Republic, organized on 1,209,061.6 hectares (6.01 percent of total territory of the country)¹⁴². It must be noted that data provided by the National Statistical Committee differs from that of the State Environment Agency, explained by the different methodologies for counting the land categories and registration of PAs. Jalal-Abad and Issyk-Kul provinces have more PA than other parts of the country. Protected areas, depending on the purpose, mode of protection of natural resources are divided into a number of categories. In 2011, a new Law 'On Specially Protected Natural Territories' was adopted, which harmonized a national system of classification categories for PAs, in accordance with the standards adopted by the International Union for Conservation of Nature.

Following independence, the territory of PAs in the Kyrgyz Republic has risen by 2.5 times and continues to increase. The following PAs were established: Karabuura (in 2005 with 59,067 hectares), Surmatash (in 2009 with 66,194 hectares) and Dashman (in 2012 with 8,189.6 hectares) state reserves, the state natural park 'Sarkent' (in 2009 with 40,000 hectares) and the state botanical closed wood, Aigul-Tash Mountain (in 2009 with 253.9 hectares). The territory of the Besh-Aral state reserve was increased by 25,270 hectares in 2006 and Salkyn-Tor, by 20 hectares.

In October 1998, the biosphere reserve Issyk-Kul was established on territory of 4,314.4 square km, which was included in the Global Network of the UNESCO Biosphere Reserves in September 2001. According to the legislation, it has a status of a special PA, however, the economic activity in the biosphere reserve Issyk-Kul does not match the requirements for a PA. The regime of economic activities implemented, especially in the coastal zone of Lake Issyk-Kul, cause significant damage to the environment and biodiversity. The deterioration of the system of environmental monitoring (such as the number of monitoring points and the sampling frequency and spectrum of controlled substances) does not allow realistic evaluation of the negative consequences. For instance, the state water monitoring of the coastal area of Lake Issyk-Kul reduced the number of monitoring points from 42 to 11 and the sampling is carried out only during the holiday season.

At present, work is being conducted to organize the natural parks Alai in Osh oblast (368,400 hectares), Khan-Tengri in Issyk-Kul oblast (187,500 hectares) and the state natural park Avletim-Ata

¹⁴² 'National Report on the Status of the Environment of the Kyrgyz Republic for 2006-2011' and data from the Decree of the Government of the Kyrgyz Republic as of 12 July 2012, № 482



(over 45,000 hectares) and to extend the territory of the Padysh-Ata state reserve (by 15,800 hectares).

In spite of the fact that the percentage of territory of PAs has increased, the achievement of the target indicator by 2015 of protected areas accounting for 10 percent of all territory of the country is unlikely. One of the main reasons for inefficient functioning of PAs is the insufficient provision of material and technical resources as well as a lack of qualified human resources. Hence, capacity building and development of established PA are priority activities. Within this area of activity, the UNDP project 'Improving coverage and effective management of the protected areas in the Central Tien Shan' was launched jointly with GEF. The project will result in the establishment of a new PA (the State Natural Park 'Khan Tengri') and will also strengthen the overall situation with the national system of PAs through pilot introduction of international standards for assessing the effectiveness of management of PAs.

Endangered species of biological organisms

The Kyrgyz Republic is characterised by a diversity of flora and fauna species: approximately 2 percent of the world's flora and 3 percent of the world's fauna are within the country's borders. The latest observations suggest that there is an increase in the proportion of species considered to be the most endangered categories in majority species groups. The list of species to be protected was extended significantly in the second edition of the Red Data Book of the Kyrgyz Republic (2007). For example the list of plants and mushrooms under protection was increased by 22 species. The current version of the Red Data Book contains 99 species of plants and mushrooms, 26 of mammals, 59 of birds, 18 of insects, 10 of amphibians and reptile and 7 of fish.

At the same time the system of PA responsible for biodiversity monitoring and especially on endangered species is still underdeveloped and suffers huge underfunding from the state. Support from academia and international research projects support is rather sporadic and does not contribute to national biodiversity conservation policy.

Carbon emissions

The Kyrgyz Republic has joined a number of international climate conventions¹⁴³, and issues of climate change are considered as one of key elements of national policy. The Coordination Commission on Climate Change under the chairmanship of the Vice-Prime Minister was established to improve coordination of activities to implement international commitments within the United Nations Framework Convention on Climate Change (UN FCCC). A draft Strategy on Climate Change Adaptation of the Kyrgyz Republic until 2020, was prepared in 2012. Additionally, the Kyrgyz Republic, which is not member of Annex 1 of the UN FCCC, made a voluntary commitment¹⁴⁴ to reduce greenhouse gas emissions by 20 percent by 2020.

The last inventory of greenhouse gas emissions for the period 2000-2005 was conducted within the framework of preparation of the Second National Communication on Climate Change of the Kyrgyz Republic for the UN FCCC¹⁴⁵ during 2000-2005. Based on the results of the inventory, some growth trends in greenhouse gas emissions were observed during 2000-2005, mainly in the energy sector. Nevertheless, due to tremendous reduction of the national industries production after the collapse of Soviet Union, the emission rate in 2005 was less than 40 percent of the emission rate of 1990. Under growth of emissions in general and average emissions per 1 km², the average emissions per capita and per one current Som of the GDP and one constant dollar of the GDP of 2000 are gradually reduced, which is linked to growth of the population and GDP. According to the data of 2005, the volume of CO₂ emissions and greenhouse gas emissions was 1.58 g/person and 2.29 g/person respectively. In 2012, preparation of the Third National Communication on Climate Change of the Kyrgyz Republic for the UN FCCC was launched, within which an inventory of greenhouse gas emissions for 2006-2010 will be conducted. However, based on data of 2005 the target values of both indicators for 2015 have been exceeded.

143 The Law of the Kyrgyz Republic 'On Accession of the Kyrgyz Republic to the UN Framework Convention on Climate Change and UNECE Convention on Transboundary Air Pollution on Long Distance' as of 14 January 2000, № 11. The Law of the Kyrgyz Republic 'On Ratification of the Kyoto Protocol to the UN Framework Convention on Climate Change' as of 15 January 2003, № 9

144 'Position of the Kyrgyz Republic regarding climate change': http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_kyrgyz_republic_workstream_1_russian_20130404.pdf

145 Decree of the Government of the Kyrgyz Republic as of 6 May 2009, № 274

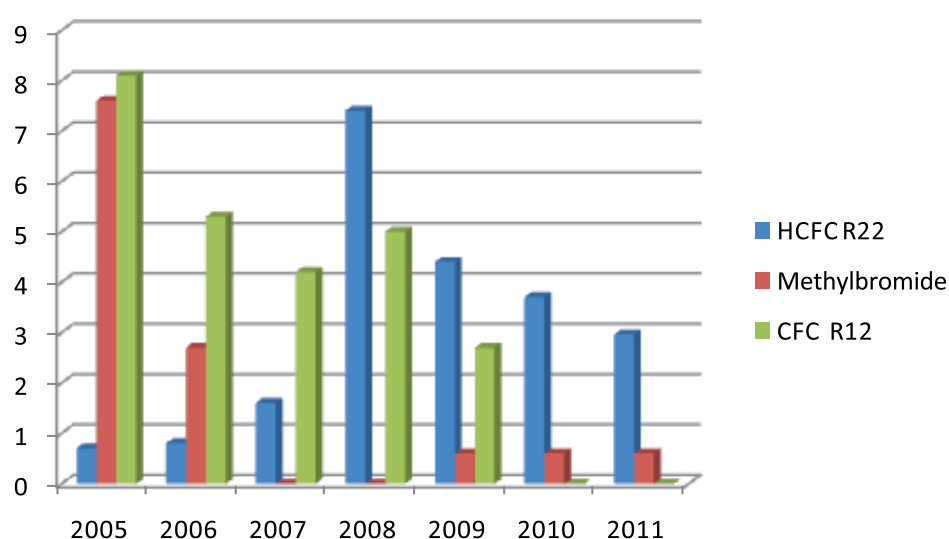


Consumption of Ozone Depleting Substances (ODSs)

The Kyrgyz Republic has ratified the Vienna Convention on Ozone Layer Protection¹⁴⁶ and the Montreal Protocol on Ozone Depleting Substances (ODSs), undertaking commitments regarding termination of ODSs production and use. The Kyrgyz Republic does not produce ODSs or equipment and goods containing ODSs. However, ODSs are imported in pure form as well as in goods and equipment, which is licensed¹⁴⁷; (although a certain proportion is illegally imported). The total consumption of ODSs reached about 79.35 metric tons in 2000 (without hydro-chlorine-fluorocarbon (HCFC)), but was reduced to 15.3 tons (with consideration of ODS)

by 2005. Implementation of the State Programme on Termination of Use of Ozone Depleting Substances for 2008-2010 (Phase 2)¹⁴⁸ allowed for a reduction of the volume of ODS consumption to 3.56 metric tons in 2011 which is made per capita use of 0.65g/person. This volume is attributed to hydro-chlorine-fluorocarbon (HCFC) and methyl bromide. The suspension of HCFC consumption in the Kyrgyz Republic¹⁴⁹, is planned by 1 January 2030. Methyl bromide is used exclusively for quarantine purposes, thus, progress related to this indicator exceeded preliminary expectations for 2015. The targeted value of the indicator for 2015 is 16g/person. The indicator has been achieved.

Figure 48. Consumption of Ozone Depleting Substances



Source: National Report on the state of Environmental Protection in the Kyrgyz Republic during 2006-2011

Gross Domestic Product's energy intensity

During 2007-2010, the GDP's energy intensity per US\$1,000 (in a parity of purchasing power) was reduced by 25.5 percent, from 0.51 to 0.38 tons of oil equivalent¹⁵⁰. In the national currency per 1,000 Som (in the prices of 2005), reduction reached 17.8 percent from 0.045 to 0.037 tons of oil equivalent¹⁵¹. The dynamics of

this indicator tells us about the increasing effectiveness of energy consumption in the country. However, this progress is not a result of targeted implementation of the relevant policy in the country, but mainly explained by the changes in GDP structure, when the industrial share reduced and the one of the services which use less energy tangibly increased.

146 Law of the Kyrgyz Republic 'On Ratification of the Vienna Convention of Protection of Ozone Layer and the Montreal Protocol on Depleting Ozone Layer Substances' as of 15 January 2000, № 16

147 Decree of the Government of the Kyrgyz Republic as of 19 September 2009, № 594

148 Decree of the Government of the Kyrgyz Republic as of 11 July 2008, № 374

149 Article 5, paragraph 1 of the Montreal Protocol on Depleting Ozone Layer Substances

150 National Report on Status of Environment of the Kyrgyz Republic for 2006-2011

151 National Report on Status of Environment of the Kyrgyz Republic for 2006-2011



Box 25. Glaciers of the Kyrgyz Republic and climate change

Approximately 45 percent of all glaciers in central Asia are located within the Kyrgyz Republic, and are one of the main sources of river feeding. Forecasts on their condition cause serious concerns because of the effects of global climate change.

Climate change affects the water discharge in small rivers fed by glaciers, the size of which is reduced. The seasonal water flow distribution is also altering. It is expected that surface water runoff will be increasing due to intensive melting of the glaciers until 2020-2025. Then, it is forecast that the water flow will be reduced by up to 42-20 cubic kilometres, which is in a range from 44 to 88 percent of the total discharge in 2000. This process will result in water deficit and the reduction of hydro-energy potential and agriculture production in the Kyrgyz Republic and the Central Asian region in general.

Source: Analytics of preliminary study for development of the draft Strategy on climate change adaptation of the Kyrgyz Republic

The target value for this indicator was not established and therefore it is necessary to more intensively introduce principles of energy efficiency in the strategies and policies of the country with further systematic implementation of specific measures.

The proportion of the population without sustainable access to safe drinking water

The Kyrgyz Republic is the only country in central Asia in which the formation of water resources takes place on its territory. The country has significant underground and surface water resources, the reserves of which are found in rivers, glaciers and snow formations.

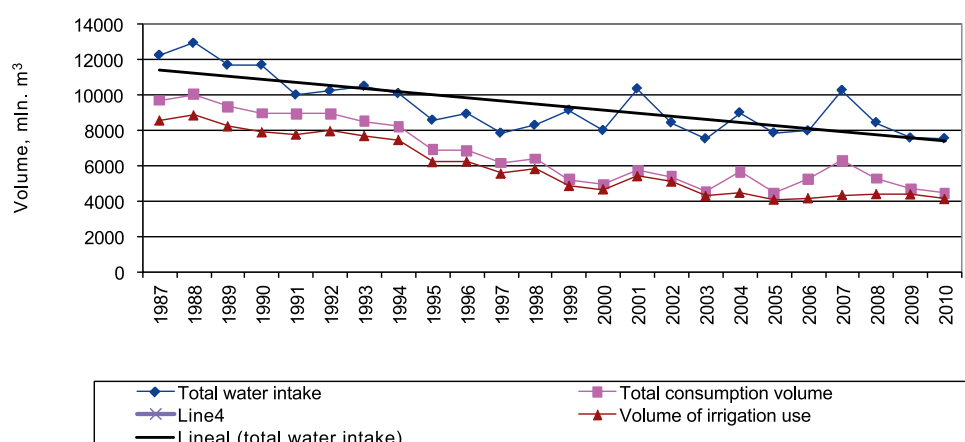
The Kyrgyz Republic uses 20-25 percent of available water resources, with the remaining water flow reaching the neighbouring states of China, Kazakhstan, Tajikistan and Uzbekistan. A significant part of water resources (over 90 percent) is used for irrigation and agricultural purposes and 80-85 percent of the water is used during the vegetation period.

According to official data, during the period from 1987 to 2010, the total water intake of the Kyrgyz Republic decreased from 12.9 cubic km to 8-10 cubic km or by 40 percent.

During the period from 2006 to 2010, the largest volume of water intake was recorded in Chui oblast (which equaled 2.71-3.43 cubic km), followed by Osh oblast (1.2-1.36 cubic km), Talas (0.83-1.11 cubic km), Jalalabad (0.59-1.36 cubic km), Naryn (0.59-0.69 cubic km), Batken (0.58-0.62 cubic km) and finally, Issyk-Kul province (0.51-0.61 cubic km).

However, about one third of all water resources is officially lost during transportation due to the deterioration of the irrigation systems and an extremely low efficiency of the water resources' use. During the period from 2006 to 2010, the official average water losses during transportation reached 1,852 million cubic meters per year or 23 percent of all water intake. The highest rate of water losses is recorded in the Jalalabad and Naryn oblasts, reaching 37 percent and 31.8 percent respectively in certain years. In the other

Figure 49. The dynamics of total water intake and consumption of fresh water (million cubic metres)



Source: The Ministry of Agriculture and Water Resources



Table 9. The structure of water consumption for the needs of households (million cubic metres)

	2006	2007	2008	2009	2010
Kyrgyz Republic	128	159	136.8	180	206
Batken oblast	0	0	0	0	0
Jalal-Abat oblast	17.4	16.5	15.4	10.6	25.3
Issyk-Kul oblast	7.97	10.4	12.4	11.6	11.5
Naryn oblast	0	0.0	0.4	0	0
Osh oblast	41.4	75.7	41.2	87.9	46.4
Talas oblast	0.98	2	2.5	2.7	2.7
Chui oblast	24.1	18.4	19.7	18.3	20.6
Bishkek City	36.6	35.9	45.3	49.2	58.1
Cubic metres per capita	25	30	26	35	40

Source: National Statistics Committee of the Kyrgyz Republic

oblasts the loss was in the range from 20 to 30 percent of water intake.

In 2010, most of the drawn fresh water – 93 percent, was used for irrigation and agricultural water supply, with 4.6 percent for domestic-drinking needs and only 2 percent for industrial purposes. This consumption pattern was seen in the span of the entire observation period. Both surface and underground water are used for irrigation, however, underground water is mostly used for industrial and domestic-drinking needs.

In comparison to 2006, the amount of water used for domestic, household and practical needs has increased by 1.6 times. The highest water intake is recorded in Chui (including Bishkek city) and Osh oblasts. Domestic water use per capita was 40 cubic meters, which is 1.6 times higher than in 2006.

The proportion of the population with sustainable access to safe drinking water

The population is provided with drinking water from 1,073 centralized domestic water supply systems, while surface waters serve as drinking water sources in 133 water supply systems. The use of obsolete pumping, treatment and disinfecting facilities and technologies and the physical deterioration of the water supply networks causes water losses of between 20 to 50 percent, while emergency situations contribute to secondary contamination of drinking water.

Around 85 percent of water supply systems in the Kyrgyz Republic use ground waters, although unequal distribution of ground water supplies across the country have mean that supplies in southern regions are significantly lower. Insufficient funding for the opera-

tion and technical maintenance of water wells and the water supply systems forced dozens of communities to shift to water intake from less safe surface water resources (such as rivers and wells).

Rapid population growth in Bishkek and Osh cities during the last 15-20 years has created significant difficulties with the provision of drinking water. As a result of people's migration from rural areas to the city in search of work, illegal and substandard settlements have sprung up in suburban areas, which were subsequently legalized. In some of these areas, the infrastructure for water supply and treatment does not exist or does not correspond to safe norms and standards.

Access of the population (rural and urban) to drinking water increased from 89.8 percent in 2006 to 92.4 percent in 2011 (see Table 1 below). Full coverage of the population with water-supply systems is observed in Bishkek city only, while there are high levels – over 90 percent – in Chui, Issyk-Kul, Talas and Jalalabad oblasts. The lowest levels are in Batken oblast, while there are not enough water supply lines in Osh city and Osh and Naryn oblasts.

The limited availability of drinking water and its low quality leads to increased morbidity of the population (see Figure 4 below). For example, the average for the overall incidence of intestinal infections is at a consistently high level, reaching from 332.4 cases in 2001 to 490.2 in 2010. The highest incidence was registered in Batken 4,161 (980.0) and Jalal-Abad 5,400 (552.8) oblasts, exceeding the country as a whole by 1.8 times. The high incidence in Batken oblast, is primarily related to the lack of access to safe drinking water.



Table 10. Proportion of the population with sustainable access to safe drinking water in urban and rural areas (%)

Oblast/year	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)
Kyrgyz Republic	89.8	93.0	90.4	90.4	91.5	92.4
Urban	99.7	99.6	99.4	99.4	99.5	99.7
Rural	82.2	88.1	85.4	85.2	86.8	88.0
Batken oblast	80.9	80.3	76.7	72.8	72.7	69.7
Jalal-Abad oblast	94.4	94.9	94.4	94.4	95.0	95.4
Issyk-Kul oblast	95.5	95.8	99.3	99.3	98.8	99.0
Naryn oblast	59.9	88.6	92.0	95.9	90.1	89.2
Osh oblast	75.1	83.0	77.3	77.1	82.3	86.4
Talas oblast	98.4	99.3	95.9	96.1	96.9	96.5
Chui oblast	99.3	99.6	98.6	98.9	99.0	99.6
Bishkek city	100	100	100	100	100	100

Source: National Statistics Committee of the Kyrgyz Republic

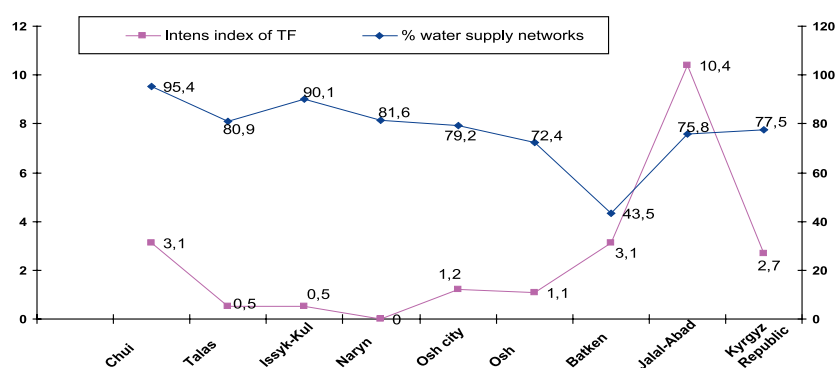
The majority of existing water-supply systems are in need of capital repairs: 40 percent of water supply systems have exceeded their depreciation periods and are out of order; 261 water supply systems do not correspond to sanitary requirements; and over 4,000 standpipes are out of order. Consequently a poor quality of services (e.g. unreliability and unpredictability of water-supply operation and poor quality of drinking water) is being observed. A number of water-supply systems are not functioning due to electricity debt and technical failure. Thus, for example, 19 out of 68 water supply lines in Talas oblast were not working in 2010.

According to the Law of the Kyrgyz Republic 'On drinking water', during the organization of individual residential communities, the State – represented by its state bodies – is required over the course of three

years to build and put into operation a water-supply line for continuous water supply to the residing population. In reality this gets delayed for lengthy periods of time. Problems with the enforcement of necessary restrictive measures in the areas of sanitary protection of water sources have arisen in relation to land reform. In most cases, these sources are not adequately equipped and protected.

Local government bodies experience chronic budget deficits, which limit the possibility of managing water supply and sanitation systems; at the same time the issue of raising tariff rates is a highly sensitive social problem. In cities and villages, water supply and sanitation operating companies, rural public associations of drinking water consumers and Ayil Okmotu are self-financed institutions and receive virtually nothing from the state budget for operation or capital investments expenditures

Figure 50: The correlation between access of population to safe drinking water and the incidence of typhoid fever



Source: The Ministry of Health of the Kyrgyz Republic



Box 26: Support from international donors for the drinking water supply: 'Taza Suu' projects

First phase. As a result of the implementation of the first phase of the 'Taza Suu' project, water supply systems were repaired in 509 villages of the Kyrgyz Republic. Of these, 169 sub-projects covering 207 villages (including 82 in Naryn oblast, 71 in Issyk-Kul oblast, and 54 villages in Talas oblast) were implemented in 2000-2009 within the framework of the 'Rural water supply and sanitation' (PRWS-1) project, funded by the World Bank (IDA) and the United Kingdom's Department for International Development (DFID). Another 118 sub-projects covering 302 villages were implemented by the 'Provision of infrastructure services at the locality level' project funded by the Asian Development Bank (ADB).

Second phase. Approximately US\$10 million were provided by the World Bank for the implementation of the Second Project on 'Rural water supply and sanitation' (PRWS-2) at the request of the Government of the Kyrgyz Republic. However, due to poor implementation of sub-projects in the First phase, only 36 sub-projects were chosen for the Second phase of implementation, including: 4 problematic sub-projects of the First phase, 26 sub-projects for eliminating shortcomings of sub-projects in the First phase and only 6 new sub-projects. As of June 2013, there were 24 sub-projects covering 26 villages being implemented in Issyk-Kul, Naryn, and Talas oblasts; out of these 13 sub-projects in 13 villages have already been completed. In addition, within the framework of PRWS-2, a project on 'Strategies for the development of the drinking water supply and discharge for settlements of the Kyrgyz Republic' was prepared and submitted for review to members of an interdepartmental group.

The Asian Development Bank allocated grant funds to the amount of US\$30 million for the implementation of the 'Provision of infrastructure services at the locality level – additional' project. Work was conducted within the framework of the Second phase for the elimination of shortcomings of the First phase's 36 problematic sub-projects. Sets of equipment for operation, repair and maintenance of the rural water supply system were purchased and transferred to 15 'Rural public associations of drinking water consumers'. In total, 12 new sub-projects on the reconstruction of rural water supply systems in 34 villages of Chui, Osh, Batken and Jalalabad oblasts were implemented within the framework of the Second phase of the Project. Design and estimate documentation was prepared for 19 sub-projects. Beginning in June 2012, the ADB Project on the 'Provision of infrastructure services at the locality level – additional' was put on hold.

Source: Community development and investment agency, www.aris.kg

The current (2011) rate of access to safe drinking water, at 92.4 percent, is higher than the target rate of 90 percent for 2015. However, a trend of decreasing access has been observed across some regions, for example, in Naryn oblast, after increasing from 59.9 percent in 2006 to 90.1 percent in 2010, the level of access decreased to 89.2 percent in 2011. In Batken oblast, the proportion of the population with access to safe drinking water has followed a continuous downward trend due to lack of local funding for high operational costs, from 80.9 percent in 2006 to 69.7 percent in 2011. Global climate change can potentially lead to a reduction in drinking water supplies, increase surface water temperature and increase the concentration of pollutants, thereby promoting the growth of microorganisms and keeping the incidence of general intestinal infections transmitted by water at a consistently high level.

Ensure significant improvement in housing conditions of the population

The proportion of the population with access to sanitation

Access to sanitation not only impacts on the sanitary-hygienic living conditions of the population but also indirectly reflects the quality of dwelling. In contrast to access to safe drinking water, the improvement of the access to sanitation has been more challenging. During the period from 2006 to 2011, the increase in the proportion of the population with access to sanitation was only 1.5 percent. Moreover, there was a negative trend from 2010 to 2011, when general access of the population to sanitation decreased from 26.4 percent to 25.4 percent (see Table 11).

Table 11. The proportion of the population with access to sanitation (%)

Oblast year	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)
Kyrgyz Republic	23.9	24.2	23.5	25.2	26.4	25.4
Batken oblast	3.1	2.1	3.2	3.3	3.2	3.0
Jalal-Abad oblast	7.1	7.3	6.5	6.2	9.4	8.8
Issyk-Kul oblast	12.9	14.4	10.5	9.7	13.2	15.4
Naryn oblast	4.5	4.7	5.4	5.9	5.3	5.6
Osh oblast	11.7	11.5	10.9	10.8	9.1	8.3
Talas oblast	3.4	3.0	3.8	4.1	3.7	9.0
Chui oblast	37.9	38.9	37.2	46.3	48.7	41.9
Bishkek city	79.2	80.1	80.8	83.8	84.9	84.6



The proportion of the population with access to sanitation varies considerably across oblasts: from the lowest value of 3 percent in Batken oblast, to the highest of 41.9 percent in Chui oblast. Improving access to sanitation is also an urban problem. In the majority of oblasts the population does not all have access to sanitation. The exceptions are Chui and Osh oblasts, which directly surround the capital, Bishkek city and the southern capital, Osh city. However, here the situation is aggravated by the fact that internal migration processes have led to a high concentration of the population in Bishkek and other large cities. As a result, the stripes of informal new settlements not equipped with sanitation systems have sprung up around the capital. Due to insufficient funding and, consequently, the scope of repair and restoration works, the existing infrastructure often does not function. In this regard, the efficiency of sewage treatment systems is a significant problem, as the quality of their operation considerably influences health and environmental conditions. According to data of the State Agency of Environmental Protection and Forestry under the Government of the Kyrgyz Republic, out of 350 wastewater treatment facilities, 40 percent do not provide normative wastewater treatment. Thus, the causes of challenges related to access to sanitation are mainly of an economic nature (although there are also governance, cultural and educational aspects to the problem).

A number of projects on water supply and sanitation have been implemented with the support of international donor organizations, with positive impacts, including:

- increase in accessibility of safe drinking water for rural residents;
- decrease in the levels of infectious and parasitic diseases;
- improvement in the quality of drinking water according to microbiological indicators;
- change in hygiene and sanitation practices;
- cooperation of partners in solving water supply problems;
- improvement of the infrastructure of sanitation and other facilities.

However, achieving the target indicator of improvement of the sanitation system is challenging. The current (2011) level of 25.4 percent access combined with the current trends suggest that achieving the target indicator value 40 percent by 2015 is unlikely.

Waste management remains a serious problem. In 2010, there were 6,921,400 tons of waste disposed of in the Kyrgyz Republic, including 5,745,900 tons (83 percent) of hazardous waste, and 1,1326,700 tons of waste generated in 2011, including 5,876,200 tons of hazardous waste. Issyk-Kul oblast accounted for 97 percent of all hazardous waste generated in 2010, with a similar trend for 2011.

Box 27: Domestic wastes transportation in Bishkek city

According to data of the municipal enterprise ‘Tazalyk’, responsible for municipal waste management in Bishkek city, there was a substantial increase in the volume of generated and transported municipal waste (a growth rate of 20 percent in 2009 compared with the previous year and a growth rate of 19 percent in 2010).

Volume of solid waste disposed on the landfill of Bishkek city (thousand cubic meters)					
2006	2007	2008	2009	2010	2011
1,440	1,524	1,600	1,917.7	2,364.3	2,431

Tazalyk collects and transports in average of 1,000-1,200 tons of solid household waste every day, disposed of in the landfill of Bishkek city. The total accumulation of waste was 13,160 million tons at the end of 2011.



2. Bottlenecks and risks in achieving the Goal

Public finances are not sufficient to fulfill the required environment protection measures. Various policy documents approved by the government or the President of the Republic do not have sustainable financing.

The low political status of the National Environmental Protection Agency makes it difficult to apply legislation in the environmental protection sphere

A higher status of the environment responsible agency is necessary to ensure environmental security and to motivate sustainable development in various sectors. A higher status would provide opportunities to initiate and enhance cooperation between ministries and sectors, and will request proper coordination of the key 'environmentally sound' decisions made by the Government especially on sustainable natural resource management.

The current environmental monitoring system does not meet modern requirements

There has been some progress in assessment of the status of environment, but the country is far from appropriate assessment based on internationally agreed indicators. An excessive number of regulated substances, low capacity of personnel and laboratory facilities of the responsible agencies, and difficulties with access of inspections to industrial and mining enterprises hamper monitoring of environment and actual follow-up of permits' conditions. Punitive measures imposed on offenders in the environmental legislation are ineffective in changing individual and

corporate behavior. Law enforcement bodies are not capable of fulfilling their duties and responsibilities at the subnational and local levels. Furthermore, the state systems of biodiversity, water and air monitoring does not work properly in the Kyrgyz Republic. Finally, environmental monitoring is still the occupation of the state with limited civil society inclusion, and participatory approaches to environment monitoring and local communities' involvement in it are virtually new concepts in this country.

Ecological control and reporting do not exist: The quality of water resources is under serious threat because of pollution in the past and economic activity in the present

Uranium tailing sites, waste dumps and radioactive waste create a high risk for environmental security and human health in the region, mostly through surface water pollution. In addition to a shortage of financing for the construction of new water supply and sanitation facilities, the solutions to these challenges is impeded by poor conditions in the existing infrastructure, inadequate quality of services and inappropriate coordination and regulation in addressing these issues.

The Kyrgyz Republic has not yet made any substantial progress in its attempts to develop the national water policy

Water management in Central Asia is very important both for the Kyrgyz Republic and the downstream countries with which the Kyrgyz Republic is bound by international commitments which are often disputable and controversial.

3. Lessons learned

The strong political will and the high status of the decisions help to ensure that policies are implemented to protect the environment and ensure environmental sustainability more effectively. The National Committee for climate change impact, established in 2005, under the auspices of the State Environmental Agency has to date failed to deliver tangible results on climate change mitigation. At the same time the Coordination Committee on Climate Change created in 2012 under the Prime Minister's office has already demonstrated a number of important decisions.

The integration of environmental considerations into country development strategies facilitates further mainstreaming of environmental issues into sectoral programmes. However, the financial pro-

vision remains a serious problem. Therefore, the implementation of national and sectoral environmental measures are not considered to be key priorities and the majority of proposed interventions remain underfunded.

Raising the awareness among and the active involvement of key decision makers from government agencies, together with the active participation of civil society, on issues of sustainable development will help to move the development vector towards a 'green' economy and integrate climate change into planning and regular activities. The failure to adopt 'green' development as being 'not economically feasible' is thereby replaced by full support for the 'green' development agenda. As international practice shows, preventive actions



within the framework of climate change adaptation and promotion, elements of the 'green economy' in the Kyrgyz Republic can bring significant economic benefits and will reduce the threat of climate change to ecosystems, human health, economic development and infrastructure to a minimum.

The most efficient programmes on environmental protection were developed with the support of international experts, without the need for large investments for implementation. For example, the positive trend in achieving the target indicator 'Consumption of ozone-depleting substances' was mainly due to the development and successful implementation of the State programme to eliminate the use of ozone-depleting substances for the period from 2008 to 2010. Another example is the successful introduction of regulatory standards to reduce car emissions. In 2008, the Kyrgyz Republic significantly increased taxes and duties for the import of cars older than 13 years and as a result the number of imported cars in 2009 fell to 22,275 units compared to 81,748 units in 2008. Moreover, there has been a downward trend in the import of vehicles older than 10 years, from 93.4 percent of total imports in 2008 to 46.3 percent in 2011, and an increase in imports of cars of 5 to 10 years old to 50.8 percent.

The absence of gender analysis in the climate change impact

leads to a lack of a clear picture of the potential risks associated with climate change to different social groups. Integrating a gender dimension in climate change issues is particularly important to prevent disparities in the development and implementation of climate change policy.

The lack of reliable statistical data seriously reduces the effectiveness of planning. The lack of proper monitoring of environmental indicators makes it impossible to fully assess the risks and socio-economic costs of environmental pollution and degradation of natural resources. For example, monitoring of air pollution by dust, benzo (a) pyrene and carbon monoxide in cities stopped with data on 1998-2000, and heavy metals in 1997. However, according to data for 1999, in the city of Bishkek the average concentrations of benzo (a) pyrene near major highways exceeded the maximum allowable rates by 25-35 times. Due to the fragmentation of the system of ecological monitoring of the environment, this problem has not been updated in a timely manner. Problems encountered in the collection and processing of environmental data reduces the potential of the available data and for making informed decisions. There is a need for training and information materials, featuring a comprehensive picture of the relationship between environmental issues and socio-economic development.

4. Recommendations

Recommendations for improving policies towards achieving the MDG7 targets include measures that were reflected in a number of country regulatory and strategic policy documents, as well as in the country reports. Given the fact that the impact of climate change on the livelihoods of the poor is becoming a reality, the implementation of climate change adaptation measures are an essential prerequisite for progress towards attaining the Goal by 2015 and should become integrated into the national strategy to achieve the MDGs.

Medium-term measures (until 2015)

- Improve the management of natural resources
- Strengthen the status and institutional capacity of the State Agency on Environmental Protection and Forestry to ensure compliance with international best practices to promote issues of 'green' development;
- Continue to improve the legislation related to the limitations on the protection of the environment and adaptation of strict regulatory requirements for natural resource management;
- Establish an Information Centre on the basis of the authorized body for the protection of the environment;
- Strengthen international cooperation in the area of environmental protection and natural resource management, including exchange of best practices and experiences in sustainable 'green' development and climate change adaptation and mainstreaming, and implement and monitor these issues through country sectoral development programmes;
- Provide institutional support to the Coordination Committee on Climate Change Adaptation;
- Build national capacities on climate change adaptation through analytical research, identification, prioritisation and development of specific project proposals and negotiations with potential donors;



- Optimise and improve the efficiency of international aid on the basis of coordination mechanisms such as the Interagency Commission on Cooperation with Global Environmental Facility; increase of the participation of representatives of local institutions, scientific development and production centres and the private sector;
- Finance approved programmes and plans in the domains of the environment and sustainable development, guaranteeing their links with the existing system of budget financing, monitoring and assessment of planned and financed events;
- Guarantee open, authentic and up-to-date ecological information concerning questions such as environmental protection, use of natural resources, and establish and develop a corresponding information system;
- Develop mechanisms that increase the commitment and participation of local government bodies and civil society in the preparation and realisation of environmental programmes and events through the improvement of the information system, ecological education, and prepare personnel in the field of ecology. Increase the responsibilities of local government bodies in the decision-making concerning environmental questions at the local level.

For the completion of the programme and events the following tasks are proposed:

- Attribute the principles of sustainable development a doctrinal character
- Improve the analysis and accountability system on the preservation of biodiversity and the forest territory, and the management of household waste, etc.;
- Improve the statistical information in the environmental sphere: including strengthening accounting, introducing requirements and procedures for the regulation of accounting of the main polluting factories in the environmental institutions and statistics, and regular publication of the results of ecological expertise, etc.;
- Improve the management of water resources through the implementation of the integrated water management principles;
- Solve the problems of the water supply on the basis of the real needs of the population, with authentic evaluation of the current service quality and the situation of the infrastructure, and realistic evaluation of the achievement of

the goals considering the available resources;

- Promote best practices in water resource management at the local level and strengthen the local structure, such as: an Association of water users and Rural communal associations of drinking water users;
- Improve monitoring including: restoration of soil monitoring, support and expansion of the water and air monitoring system, improvement of data quality control and establishment of the national water and land monitoring system;
- Develop research and applied works in the field of environmental protection, and improve the academic assessment of the situation;
- Introduce measures for preventing technogenic catastrophes, especially elimination of the dangers caused by uranium tailing pounds to the health of the population and the environment, including water bodies;
- Strengthen measures that protect the underground water from pollution including: stop illegal activity in the zones of sanitary protection; delimitation and demarcation of the sanitary protection zones, and strengthen the normative basis;
- Prepare and strengthen the motivation for recycling and usage of waste, and usage of recoverable resources and harvests;
- Manage water resources based on the principles of rational usage and water supply, protect water quality and control the pollution of water resources, and achieve international requirements.

For the improvement of economic mechanisms that establish the motivation needed for the business sector, the following are proposed:

- Prepare a system of economic indicators that provide for accountancy of natural resources and assessment of the impact of household activities on their situation, and the utilisation of this system for the assessment of plans, programmes and legal acts.
- Economic stimulation for the implementation of environmental-friendly, resource-efficient, low-waste/no-waste technologies and equipment;
- Normative establishment of stimuli concerning the implementation of international standards of ecological management ISO 14000.



Long-term measures (after 2015)

For the improvement of the efficiency of governance, the following tasks should be conducted:

- Improve the regulatory environment for the different functions concerning the ownership, usage and distribution of natural resources;
- Adapt national legislation to the requirements of the Orchestration Convention so that it is implemented by governmental bodies and applied by judicial institutions (especially at the local level);
- Implement the international experience of 'green growth' and climate change adaptation into the sectoral strategic documents and in their realisation;
- Finance the confirmed plans and programmes in the spheres of the environment and sustainable development, linking it to the current system of budget financing, and monitoring and assessment of planned and financed events;
- Improve the efficiency of law enforcement and maintain the system in the environmental sphere, including increase the ecological punishments, alignment of the frequency of inspections and risks, conducting internal audit for the services involved in the process of inspection and control.

For the completion of the programme and events the following tasks are proposed:

- Include sustainable development principles in regulatory acts and in all socio-economic development strategies and sectoral programmes;
- Improve the statistical information in the environmental sphere including: strengthening accounting, introducing requirements and procedures for the regulation of accounting of the main polluting factories in the environmental sphere and regular publishing of the results of ecological expertise;
- Develop the financial self-sufficiency of hydro-economic enterprises; and strengthen the coordination of and informational campaigns from the government, especially on sanitation;
- Improve monitoring including: restoration of soil monitoring, support for and expansion of the water and

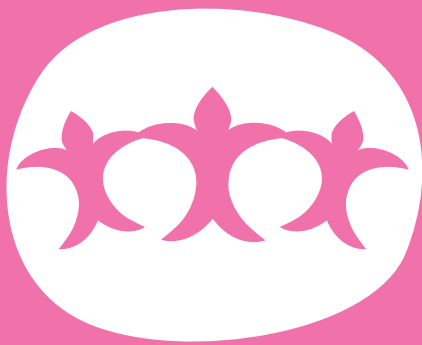
air monitoring system, improvement of data quality control, and establishment of the national water and land monitoring system;

- Develop research and applied works in the field of the environmental protection, and improve the academic assessment of the situation;
- Introduce preventive measures for climate change adaptation;
- Increase of the share of recycling and usage of waste, and use of secondary resources and harvests; (?использования вторичных ресурсов и сбора;)
- Manage water resource based on the principles of rational usage and water supply, protect water quality and control the pollution of water resources, and achieve international requirements.
- Solve the problems of water supply on the basis of the real needs of the population, with authentic evaluation of current service quality and the situation of the infrastructure, realistic evaluation of the achievement of the goals considering the available resources; develop financial self-sufficiency of hydro-economic enterprises; and strengthen the coordination of and informational campaigns from the government, especially on sanitation.

For the improvement of economic mechanisms that establish the motivation needed for the business sector, the following is proposed:

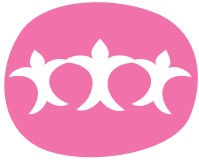
- Prepare a system of economic indicators that provide for the accountancy of natural resources and assessment of the impact of household activities on their situation, and usage of this system for the assessment of plans, programmes and legal acts.
- Introduce stimulating taxes and payments, simplify the payments for the pollution system, introduce the incorporation of ecological expenses into the price structure, and implement an ecological audit and insurance;
- Stimulate the rational usage of natural resources, as well as the transition towards an economical utilisation of non-renewable energy sources and a sustainable utilisation of renewable resources to avoid depletion.





GOAL 8.

DEVELOP A GLOBAL
PARTNERSHIP FOR DEVELOPMENT



Goal 8 Develop a global partnership for development

TARGET¹⁵²

strengthen international cooperation to support the country's capacity development
develop and implement strategies to create decent and productive work for youth
in cooperation with the private sector, make available the benefits of new technologies, especially in the areas of information and communications

1. Current situation and trends

The Millennium Development Goal (MDG) 8 aims to create new mechanisms for global partnership for the purpose of political, social and economic development. This goal is applicable to both industrialized and developing countries. The Regional Report on the Millennium Development Goals in Europe and the Commonwealth of Independent States (CIS)¹⁵³ stated that this goal requires developed countries to reduce the debt burdens of developing ones and to provide them with the necessary assistance and better access to technology and markets. Moreover, the acceleration of MDG 8 requires of regular annual review of aid effectiveness and further strengthening of partnerships between governments, the private sector and civil society to enhance and consolidate efforts. The United Nations Economic and Social Council estimates official development assistance (ODA) to be 0.31 percent of the national income (GDP) of developed countries which is below the target indicator of 0.7 percent. Nevertheless, despite discrepancies in expectations, ODA continues to grow and in 2009 it reached its highest level at almost US\$120 billion¹⁵⁴.

The Regional Report¹⁵⁵ says that the situation in the poorer countries of Central Asia poses a development challenge for the international community, but despite this, the international community does not pay much attention to the Central Asia region as

it does to other vulnerable regions of the world. The report also stresses that assistance from the international community should be matched by a willingness on the part of Central Asia to help itself.

To achieve the indicators provided by the Millennium Declaration for 2015, new models of cooperation and delivery of international assistance were developed and applied, based on the principles of the Paris Declaration. These models have helped in the setting of national development priorities, improving coordination in foreign aid and reducing overlaps. Nevertheless, it is too early to assess whether these measures have helped to increase the cost-effectiveness of development assistance. The lack of prioritization from donors and from the government did not allow the situation to change to any great extent. For example, the development assistance towards the achievement of MDGs 4-6 requires more coordination to reduce accumulated failures and support positive trends. Introducing more gender sensitivity to the methodology of allocation of development assistance will help increase aid effectiveness. In general, the different sources of funding assistance to support the country's national budget should be better integrated. SWAp mechanisms should be optimized to increase the consolidated impact of direct budget support.

152 Since originally the target values for two MDG8 indicators (youth employment and access to information and communications technology [ICT]) out of three were not established, it was decided to use a Diamond diagram

153 Regional report on the Millennium Development Goals in the European and CIS countries 'National Millennium Development Goals – the platform for action', 2006

154 <http://www.un.org/ru/ecosoc/about/mdg8.shtml>

155 Regional report on the Millennium Development Goals in the European and CIS countries 'National Millennium Development Goals – the platform for action', 2006



The analysis in the previous sections demonstrated that many targets are unlikely to be achieved in the coming years. This challenge calls for stronger partnerships among different actors. In general, the relevance of the eighth goal is increasing, particularly in connection with the events in the Kyrgyz Republic after the 2010 revolution, that led to changing the constitution and the transition to a parliamentary form of government.

It should be noted that compared with international formulations, the national MDG8 targets have been adopted in truncated form. To some extent, the importance of this goal for the Kyrgyz Republic has been reduced, as it does not allow a comprehensive approach addressing all aspects of development partnership.

To monitor progress in addressing the aims of MDG8, the following indicators are used:

- The amount of external debt as a percentage of gross domestic product (GDP) of the country;
- The cost of servicing the external debt as a proportion of exports of goods and services;
- The level of unemployment among young people;
- The number of landline and cellular telephones per 1,000 population;
- The use of personal computers and Internet users per 100 population¹⁵⁷.

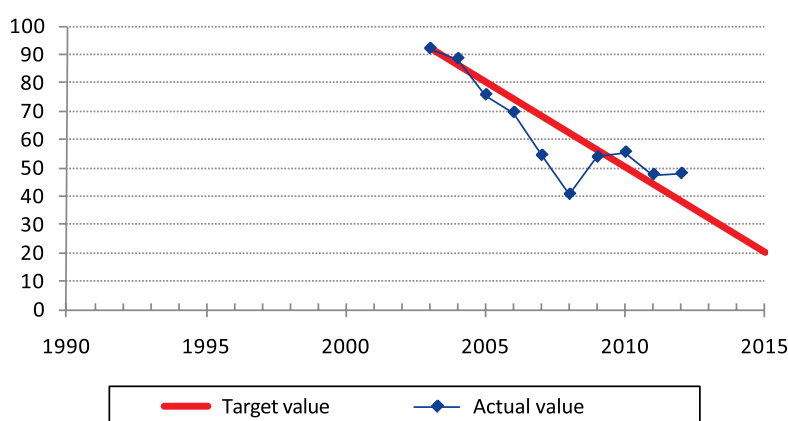
It should be noted that the problems faced by the Kyrgyz Re-

public in recent years aggravated problems related to the stability of economic development and the need for more effective management of external debt.

Cooperation with the international community to develop the potential of the country

The first decade of independence of the Kyrgyz Republic was accompanied by major socio-economic problems of formation and this pushed the Government to increase a portfolio of foreign borrowings to address them. The scale of foreign aid received by the Kyrgyz Republic was impressive and suggested that the effect of aid must also be significant. However, the lack of criteria for the effective use of foreign aid and the management strategy for the medium term, have created additional risks and negative impact on the sustainability of external debt. By 2000, external debt had reached 101.9 percent of GDP¹⁵⁸ and threatened the country's ability to direct significant resources to social and economic programmes. Difficulties with external debt servicing since independence forced the government to undertake a series of measures aimed at reducing the debt level, including debt restructuring through the Paris Club. These measures helped to reduce the external debt to 40.6 percent of GDP by 2008. Therefore, the second MDG Progress Report¹⁵⁹ made an assumption that the target value will be reached in 2013, however, later this trend changed for the worse.

Figure 51. The volume of external debt (as % of GDP)



Source: National Bank of the Kyrgyz Republic

157 For the first and last three indicators targets were not identified

158 2nd National MDGs Progress Report. Kyrgyz Republic. 2008

159 2nd National MDGs Report. Kyrgyz Republic. 2008



The significant increase in external debt during the five year period is attributable to the development of borrowed funds under current loans and new loan agreements, however the borrowed funds were misused under corruption schemes of Bakiev's regime.

In 2011, foreign national debt increased by US\$186.9 million in nominal terms (or 3.2 percent in relation to GDP) compared to 2010. The increase of foreign debt in 2011 was due to an increase in the deficit of the state budget as a result of political, social and economic instability resulting from the events in the country during April-June 2010. It should be noted that after the change of government and inter-ethnic conflict in the south, the international community adopted a comprehensive programme of assistance, increasing the grant to support the country to build new democratic institutions and supporting the reform and rehabilitation of social and political stability. In general, the democratization process in the Kyrgyz Republic required significant financial resources leading to the government having to expand its foreign aid. However, the adverse events that occurred during 2008-2010, had almost no impact on the timeliness of servicing current financial obligations on the national debt.

The situation with foreign debt became less problematic following the write-off of the Kyrgyz Republic's US\$51 million debt to Turkey in 2012 and US\$500 million to Russia. In the same period preferential loans were made for US\$106 million from Turkey and US\$389.8 million from the Export-Import Bank of China, thereby increasing the external debt.

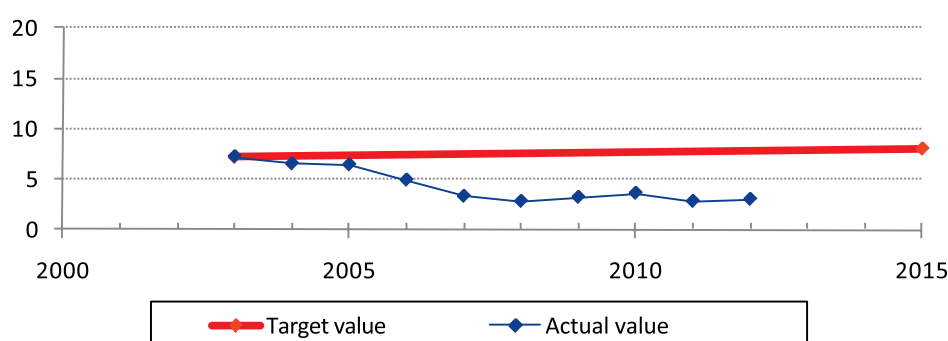
The national debt of the Kyrgyz Republic was 47.9 percent of GDP at the end of 2012, up from 45.6 percent of GDP in 2011 (but significantly lower than the 55.2 percent recorded in 2010).

As it was reported during a meeting of the National Council on Sustainable Development, the efforts to reduce the external debt have led to the debt becoming within acceptable limits and poses no immediate economic threat to the Kyrgyz Republic. According to the indicator of the cost of servicing external debts, as a share of exports of goods and services, the cost of servicing of external debt in recent years was lower than the target indicator and does not exceed 4 percent.

The peak of the cost of servicing the current foreign national debt will fall between 2015-2020, when the Government of the Kyrgyz Republic will start repaying the principal amount of loans (with accrued interest on loans). The principal amount of the debt will rise each year, whereas the interest starting from 2015 will go down. The very minimum amount of interest falls in 2020.

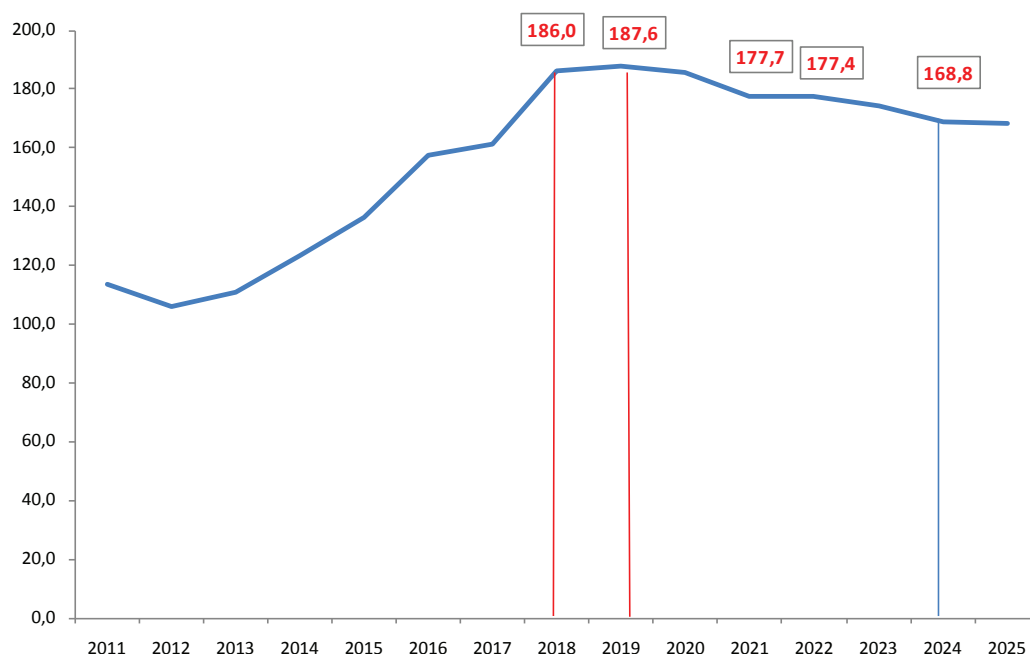
The Kyrgyz Republic made significant efforts to further reduce foreign debt to a level at which the performance of external liabilities will not result in a further deterioration of trends in the social sphere, especially on poverty and the health sector. For example, in 2012, at the Conference on Sustainable Development 'Rio +20' the Kyrgyz Republic put forward the 'Mountain Initiative', providing for the exchange of multilateral debts of developing mountain countries (including the Kyrgyz Republic) for environmental and sustainable 'green growth' initiatives.

Figure 52. The cost of servicing external debts, as a share of exports of goods and services (%)



Source: National Bank of the Kyrgyz Republic

Figure 53. The perspective of servicing the external debt (US\$ millions)



Source: Calculations of the interdepartmental working group on restructuring the foreign debt of the Kyrgyz Republic, created by order of the Government of the Kyrgyz Republic dated 23 September 2011, № 455

Box 28: Debt Swap for Sustainable Development

The Kyrgyz Republic signed a number of debt swaps (debt rescheduling agreements) with the German Development Bank KfW aimed at improving the living conditions and food quality for tuberculosis patients in prisons and for municipal infrastructure.

The first debt swap agreement between KfW and the Government of the Kyrgyz Republic for EUR 770,000 was signed in 2005. The swap was used to improve the treatment of tuberculosis patients in prisons (with 45 percent of the project amount covered by the state budget).

The second debt swap agreement between KfW, the government and the Community Development and Investment Agency ARIS, was signed in 2010. The 'Debt Swap-II Communal Infrastructure Project' aimed to develop the social infrastructure and services in rural areas using new energy-saving technologies in construction and to reduce the external debt of the Kyrgyz Republic. The project intends to build a number of kindergartens, schools and first-aid points using energy-efficient construction techniques. The total amount of debt swap is EUR 5 million. The Government of the Kyrgyz Republic committed to providing 45 percent of the Project budget (EUR 2.25 million).

The third Project 'Debt Swap III – Communal infrastructure and poverty alleviation' between KfW and the government was signed in December 2012. The conversion of the debt to the amount of EUR 8.5 million also envisages that the Government of the Kyrgyz Republic will contribute 45 percent to the Project implementation.

Access of youth to decent and productive work

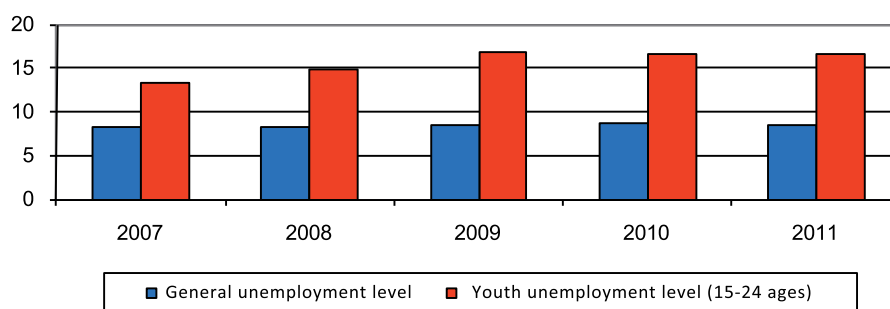
The Kyrgyz Republic experienced a high rate of population growth in the early 1990s, hence the problem of unemployment is now acute due to the slow pace of economic growth and the absence of new jobs. This situation was exacerbated by the social and political upheavals that have occurred in the country in the last decade. Despite the measures taken by the government, the unem-

ployment rate remains high. In 2011, the overall unemployment rate was 8.5 percent¹⁶⁰, a decrease of 0.1 percent compared to 2010. Unemployment among women is higher than among men (9.9 percent compared to 7.6 percent). The actual unemployment exceeds these figures.

The situation with unemployment is even more acute among the youth. In 2011 the level of unemployment among youth reached

160 National Statistical Committee of the Kyrgyz Republic

Figure 54. Dynamics of unemployment indicators during 2007-2011 (%)



Source: National Statistics Committee

Table 12. Level of unemployment among young people aged between 15-28 years, by gender and region (%)

	2011		
	General (%)	Women (%)	Men (%)
Kyrgyz Republic	14.0	17.1	12.1
Batken oblast	14.7	18.3	12.7
Jalal-Abat oblast	11.7	15.0	9.7
Issyk-Kul oblast	19.1	22.6	17.3
Naryn oblast	19.7	32.6	14.2
Osh oblast	9.8	12.7	8.1
Talas oblast	12.3	14.6	10.8
Chui oblast	15.9	16.8	15.2
Bishkek City	20.2	23.4	17.9

Source: National Statistical Committee of the Kyrgyz Republic

16.6 percent with moderate improvement 0.1 percent since 2010.

The data presented in Figure 53 shows that the youth unemployment rate is three times higher than the unemployment rate of the adult population. Factors explaining this are the low level of competitiveness and poor adaptation of youth to working conditions. To solve this problem, the government needs to place more emphasis on vocational education and training for young people from high school to professional life. The high unemployment level among young people in the Kyrgyz Republic can also be explained by the fact that many young people leave to go abroad as migrant workers illegally.

The highest unemployment rates are registered in Bishkek, Issyk-Kul and Naryn oblasts. The level of unemployment in Bishkek is explained by high internal migration from the regions to the capital.

Gender gaps are significant in rural areas compared to Bishkek.

In addition to traditional gender-based discrimination in labour markets, young women have limited access to employment. This can be explained according to some experts and politicians by early marriages, especially in rural areas.

Women tend to establish micro-enterprises in the area of trade and services. Lack of necessary information, access to resources necessary to start a business, unfavorable tax environment and administrative barriers often push women into the informal sector which in most cases is not covered by social protection system.

The United Nations Population Fund's (UNFPA) economic analysis of interference of demographic processes and labour resources and employment¹⁶³, showed that the slow pace and low scale of development in the real sectors of the economy was one of the key factors that brought about stagnation in the labour market. According to the calculations of the analysis more than 70,000 young peo-

ple remained outside the national labour market and had to seek employment outside of the country or put them into a risk of anti-social behavior. Most of the labourmigrants came from rural areas and did not possess professional qualifications and skills. Only 38 percent of employed youth are occupied in agriculture.

Integration in the international information space

Improving access to information and communication technology (ICT) is one of the most important outcomes in the process of strengthening global partnership. The Kyrgyz Republic has taken major initiatives in this area. Currently more than 95 percent¹⁶¹, of the population is provided with one or more of phone services, telephone lines, networks and mobile communication networks. Internet cafes and dial-up Internet connections are available in all towns and mobile and telephone communication services are becoming more widespread.

Communications operators in the Kyrgyz Republic provide basic telephone services using wirelines, networks and mobile communications. According to the survey commissioned by the Kyrgyz Association of Software and Services, the level of penetration of the cellular market of the Kyrgyz Republic is 75-78 percent¹⁶².

According to the data of the National Agency on Communications in 2010 the number of mobile users in Kyrgyzstan reached 4.9 million (90.5 percent of the total population). Mobile services are delivered by seven mobile operators. The mobile market is characterised by dynamic growth in a number of mobile users and an increasing volume of services. The level of coverage by mobile communications services in the regions is also high, at 98 percent. Naryn and Batken Oblasts are less covered, with 95 percent and 85 percent respectively.

Some errors in data may occur due the fact that survey was

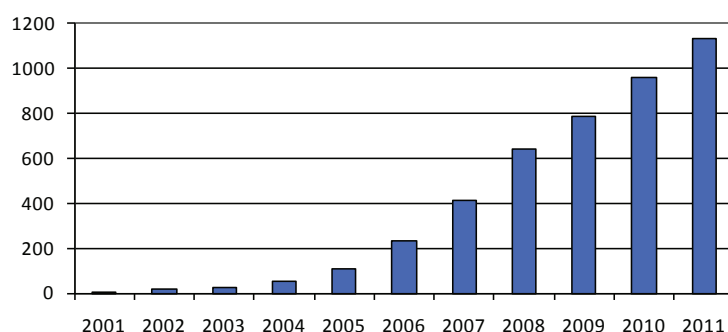
conducted at the level of oblast administrations among the active layers of the population and did not include children, the elderly and those living below the poverty line, who is unlikely to have self-mobile phone. At the same time, it is necessary to take into account the fact that some people have 2 mobile phone with two SIM cards of different mobile operators.

Mobile communications in Kyrgyzstan are today associated with new opportunities to improve the quality of life, stimulate the development of education and health, strengthen relationships, and reduce distances. While the price of bread increased by 8 times, and the price of milk by 6 times over the last 12 years, the cost of mobile services has been gradually decreasing— down by 15 times – while penetration has increased by nearly 500 times. Since 90th the expenditures on mobile services decreased by 10 times and now constitute 10\$ a month. The level of wages in the Kyrgyz Republic increased by nearly five times from 2002 to 2012, while the share of the expenditures on mobile services in general individual expenditures has decreased from 14.4 to 1.7 percent.

The contribution of mobile communications to the GDP of the country for the past decade increased threefold and constitutes 1.5 percent of GDP. Mobile communications stimulate the development of related industries, create jobs, improve productivity and business efficiency and help integration into global information networks.

The calculation of the indicator 'Number of personal computers in use and number of Internet users per 100 people' is difficult because of the statistical errors involved in trying to register only computers that are actually in use. The available statistics demonstrate that the number of enterprises using ICT is growing significantly and there is a notable increase in the use of personal computers (PCs), the Internet and e-mail.

Figure 55. Coverage by mobile communication per 1000 of population



Source: National Agency on Communications

161 «Information and Communication for Development 2012: Expanding the mobile communications capacities, World Bank and InfoDev

162 Transparency of tariffs policy for Internet services in the Kyrgyz Republic, Bishkek, 2010

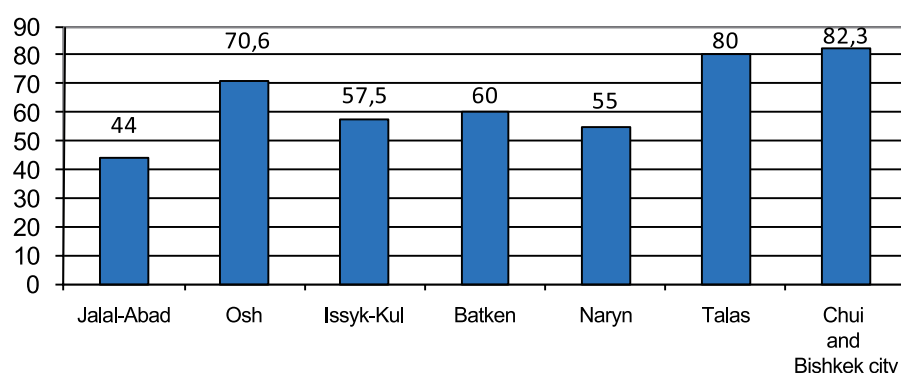


Table 13. Use of information and communications technology (ICT) by private and state enterprises

	2007	2008	2009	2010	2011
Number of enterprises that use ICT	5,412	5,847	6,306	8,621	8,894
Including%					
Personal Computers	94.7	96.5	96.9	95.6	95.5
Local Computer networks	16.9	16.8	19.0	16.8	17.5
E-mail	26.6	28.7	32.2	28.5	30.7
Internet	30.0	32.8	38.0	34.3	38.6

There is no gender gap between male and female computer users – percentage of men and women is 75%.

Figure 56. Proportion of Personal Computer (PC) users by region (%)



Source: "Analysis of ICT needs and development perspectives in the regions" "iCap", Bishkek, 2012

According to the "Analysis of the needs of the regions in ICT and development prospects"¹⁶³ the highest level of the computer usage recorded in Bishkek city, Chui and Talas oblasts - over 80 percent, and the lowest in Jalal-Abad oblast– 44 percent. In the other oblasts the computer usage rate is slightly higher, covering more than half of the respondents.

The number of Internet users in the country is increasing annually. Prices for Internet access have decreased by more than 60 percent since 2004 and continue to fall. The price caps remain high for an average consumer, as well as for a rural resident¹⁶⁴.

The high level of mobile penetration, improving access to the Internet and increasing number of PC users has strengthened national partnership mechanisms. E-governance has helped to increase interaction between citizens and state agencies, as well as providing access to information through open web-platforms. In 2012, for example, the Ministry of Finance launched new treasury management information system through which citizens can monitor state

budget expenditure. The state portal of information resources pools together the government's electronic instruments – main economic data, state procurement system, budget transparency, foreign aid, etc. The Ministry of Emergency actively uses mobile communication and electronic media to inform the population about the potential risk of natural disasters. The Ministry of Agriculture uses communication channels to inform farmers about weather conditions.

In the last decade the direct contribution of mobile communication services in the country's GDP increased by 3 times and constitutes 1.5 percent of GDP. Development of mobile communications industry consequently stimulates the development of related industries, creates jobs, improves productivity and business efficiency, and promotes the creation of a global information space. With this in mind, the real share of the mobile communications industry to GDP is 3 times higher and constitutes 4.9% of GDP. Fast development of mobile communications industry contribute to strengthening of business environment and increases trust of foreign investors to the country as a whole.

¹⁶³ 'Analysis of the needs of the regions in ICT and development prospects', iCap, Bishkek, 2012

¹⁶⁴ The report 'Review of the ICT industry in Kyrgyzstan'. The study was conducted by 'Promotank HQA' at the request of Japan International Cooperation Agency (JICA). Bishkek, 2011

2. Bottlenecks and risks in achieving the Goal

Despite the measures taken by the government, the situation with external debt remains unstable. This is due both to the increase in external debt and the precarious economic growth. For example, in 2012, the economy contracted by 0.9 percent, rather than the planned 5 percent growth. In 2013, the economy may not achieve the figures planned by the government, which together with other factors such as the high level of fiscal deficit and expenditures for the social sector, may create difficulties with the external debt service. Capacity to service the debts without having high pressure on the state budget will largely depend on the stability of foreign exchange inflows and of the Some exchange rate against foreign currencies, together with the rigidity of the policy of attracting new loans, strengthening control and analysis of the effectiveness of the use of government loans and borrowings.

The irrational policy of attracting new foreign borrowing can lead to another cycle of rapid accumulation of foreign debt similarly to that which took place in the Kyrgyz Republic in the 1990s.

This problem is exacerbated by the growth of social obligations and new political initiatives, which leads to a significant increase of foreign aid and poses a threat to sustainable economic growth. For example, the National Sustainable Development Strategy of the Kyrgyz Republic for the period 2013-2017 highlights that growth of the debt burden increases the threat of the financial stability of the state under conditions of a large budget deficit and the limited resources of the state to increase pensions, benefits, wages and the financing

of economic development programmes and projects.

High unemployment results from low economic growth, which leads to the stagnation of the national labour market. The National Sustainable Development Strategy for 2013-2017 states that the major problem for young people in the Kyrgyz Republic is unemployment and the high level of migration. According to the results of national post-Rio+20 consultations on the development challenges beyond 2015, unemployment was the priority issue.

A major obstacle to job creation is the lack of professional skills among young people and thus their low competitiveness in entering labour markets. Many young people are engaged in low-skilled labour-intensive works with low wage levels. The National system of vocational education is unable to develop the necessary knowledge and skills due to the mismatch between the professional training curriculum and the demands of labour markets.

Access to ICT in the regions is restricted by the low incomes of residents. The development of the telecommunications infrastructure has reached a high rate only in the profitable segments of the industry and in areas with high population density.

Despite the sufficient level of accessibility of mobile communication technologies in the Kyrgyz Republic, 30 percent of users believe that tariffs of mobile communication services are still high. Since 2004, there has been notable decrease of tariffs for Internet access (almost 60 percent), although it is still expensive for consumers with average levels of income, especially in rural areas¹⁶⁵.

Box 29. E-Government Readiness Index

The Kyrgyz Republic lost eight points in the E-Government Readiness Index (EGDI)¹⁶⁶ in 2011 compared to 2010 and is now ranked 99th. According to experts this fall can be explained by:

- lack of political commitment to mainstreaming ICT at all levels of state policy-making;
- lack of a systematic approach in the development of the ICT sector;
- lack of a unified state policy towards development of the ICT sector;
- lack of qualified ICT development experts;
- lack of coordination in introducing ICT into the work of government agencies and a slow rate in development of e-services to the public and businesses;
 - weak interaction between state bodies and the business community and civil society on development of e-governance applications;
 - technological inferiority in the development of the ICT industry, in particular, poor development of the telecommunications infrastructure, accompanied by slow growth of broadband internet access;
 - lack of coordinated efforts among development partners.

¹⁶⁵ 'Overview of ICT market in Kyrgyzstan', JICA, 2011

¹⁶⁶ <http://www.un.org/en/development/desa/publications/connecting-governments-to-citizens.html>



3. Lessons learned

Against the backdrop of the political changes that are taking place in the Kyrgyz Republic, the need to develop new approaches to foreign debt management must be an integral component of ongoing administrative and economic reforms. International financial and technical assistance should bring more focus on the end results, aiming at further sustainability and improvement of public services delivery.

Many experts believe that improved coordination among donor governments and multilateral aid organizations could make global development assistance more efficient and effective. Aid proliferation, donor fragmentation and lack of coordination have been identified for decades as serious problems impairing aid effectiveness. National ownership and sustainability of the development results remain weak.

After the collapse of the planned system of distribution of labour resources, the Kyrgyz Republic failed to create alternative options for systematic labour market forecasting. The limited opportunities in the domestic labour market has led to a significant

outflow of labour forces to other countries. The lack of professional skills and experience create serious obstacles for young people to obtain work in the domestic market and abroad, forcing them to seek employment in the informal economy. The system of professional training and retraining suffers from a lack of qualified specialists, absence of modern methodologies of teaching, and poor technical infrastructure. Creating more favourable conditions for small-medium business development, including expanding the range of financial services, would facilitate employment among the most vulnerable groups.

The ICT sector has undergone rapid development in the Kyrgyz Republic in recent years. It is important now to continue to support the development of the sector at the government level, through mainstreaming ICT into national development priorities. Poor sector competitiveness, insufficient human capacity and weak national institutions create key constraints for a more accelerated growth of the industry and underestimate the critical benefits in improving people's lives.

4. Recommendations

Strengthening cooperation with the international community for building the country's capacity

Medium-term measures (until 2015)

Against the backdrop of the political transition taking place in Kyrgyzstan, the need to develop new approaches to borrowing and debt is driven by ongoing administrative and economic reforms. The focus on the end result, the sustainability of structures and systems developed and implemented as a result of foreign aid and providing appropriate and high quality services to the public, should constitute the key principles and criteria for the use of external financial and technical assistance.

Recommendations on the foreign debt management policy

- The achievement of high rates of economic growth cannot address the solvency constraints due to the negative growth trend of external debt servicing in the mid-term. Therefore, the Government of the Kyrgyz Republic is now required to

take actions to improve revenue collection in line with reducing budget expenditures.

- The Government of the Kyrgyz Republic should be more focused on domestic borrowing, with the need to consider the possibility of the mobilisation of domestic currency loans to the amount necessary to cover the successive payments on external debt (or part thereof).
- The Ministry of Finance of the Kyrgyz Republic in deciding on new loans is advised to be governed by analysis of the impact of external debt on the balance of payments.
- The Ministry of Finance is advised to elaborate mechanisms of control of private unsecured loans.
- The government, in relation to currency support of external payments, is required to take action to encourage the growth of export and import substitution, promoting foreign direct investments.
- The government is required to minimise the use of foreign loans to cover the country's budget deficit.

Recommendations on arrangements

- The Ministry of Foreign Affairs of the Kyrgyz Republic is required to strengthen coordination with the Ministry of Finance and provide regular updates on upcoming international forums with the participation of donor countries and international partners to elaborate proposals of the Kyrgyz Republic on issues of external debt.
- The government must use the platform of bilateral commission with creditor countries (China, Germany, the republic of Korea and the Russian Federation) for restructuring of bilateral debts, in particular, for proposing exchange operations.
- The Ministry of Economy of the Kyrgyz Republic is recommended to intensify measures to increase investments to generate revenues in foreign currency.
- The Ministry of Finance is recommended to reduce the volumes of Public Investment Programme (PIP) and tighten control of external borrowings.
- The government is recommended to legally enforce the approximate thresholds of annual borrowings accounting for GDP growth, balance of payments, investment climate and other factors (for example US\$50-60 million).
- The government is recommended to develop counter-measures aimed at recognition of debts that may arise as a result of litigation against nationalised enterprises (following the events of 2010).

Long-term measures (after 2015)

The abovementioned recommendations remain relevant in the long run, nonetheless it is necessary to pursue tougher policies on foreign borrowings given the projected growth of foreign debt payments.

Access of youth to decent and well paid jobs

Medium-term measures (until 2015)

An action plan must be developed to address the limited access of young people to decent and well paid jobs. The action plan should include measures to develop national and regional labour markets, facilitate employment, create adequate conditions for access to the international labour market resulting from the improved quality of workforce training, and protect the economic and social rights of labour migrants.

A key condition for the expansion of the labour market is the creation of an enabling business environment that should

include a set of both legislative and administrative actions. The new law must support entrepreneurship and create institutions to facilitate support, such as a foundation of enterprise development, investment promotion agency, technology parks and industrial zones. It is also necessary to ensure practical implementation of laws on public-private partnership, for example, the Hi-Tech Park. Efforts must continue to improve the business environment, streamlining the system of inspections, simplifying the tax and customs administration and reducing the bureaucratic administration of the economy. The government needs to support the initiatives of the business community to establish effective public-private dialogue.

Long-term measures (after 2015)

The system of vocational education should be closely aligned with the demands of industry. A sustainable system of job placement for young people, human resources training and continuing education and training on new professions in demand in the labour market should be created at the government level.

Integration into international information networks

The telecommunications infrastructure must be developed through implementation of the following actions:

- ICT must be a mandatory inclusion in national and regional development strategies in all sectors of the economy of the Kyrgyz Republic, facilitating the attraction of private and foreign capital in the development of the telecommunications infrastructure.
- The state-owned telecommunications company should be privatised.
- A modern national data transfer network must be developed, including the installation of long-distance fibre-optic communications lines and telephone systems in populated areas of the country which lack telephone communications.
- The accessibility of the radio-frequency spectrum for new wireless communication technologies must be improved and access promoted to the use of new wireless technologies (WiMax).

Medium-term measures (until 2015)

For the fully-fledged implementation of E-Government, according to the UNDP Study in 2010, it is necessary to:

- Develop Programme Management Units (PMUs) to coordi-

nate the performance of E-Government. It is recommended to create a standing body – the PMU, under the auspices of the National Council for ICT established by the Prime Minister's Office – to ensure effective operations and project management, as well as provide support to various ministries associated with ICT and e-governance. The PMU will be responsible for identifying areas for standardisation and overall functioning of the government, reducing redundancy and duplication of systems and processes, identifying the priority services for automation, innovation and finding solutions that consolidate ICT expertise and facilitate teamwork and streamline administration.

- Coordinate donor inputs, with heightened accountability and donors' requirements of management to support projects.
- Clarify requirements for financing of ICT projects. Donors should develop a financial model that ensures financial self-sufficiency for a certain period of time.
- Align the concerns of stakeholders. A mechanism for multilateral stakeholder involvement should be developed, accounting for the voices of citizens in relation to their expectations. Civil society should be encouraged to participate in decision-making and express views on critical issues. The mechanism will also enable stakeholders and civil society to play a proactive role in mobilising public opinion and representing the interests of groups of citizens on critical issues.
- Develop a common infrastructure. A common ICT infrastructure should be developed, based on open standards that would allow services to be provided at a lower cost and in less time.

Long-term measures (after 2015)

In developing human capacity it is necessary to:

- Provide good quality education and vocational training at all levels, from elementary school to the adult population, thereby enabling the creation of conducive conditions for a larger number of people, and especially for those who are disadvantaged. The capacity of the population in effective use of ICT should be improved through regional and international cooperation.
- Refine basic education and continuing education in the field of scientific and technical disciplines to ensure sufficient numbers of qualified and experienced professionals and experts in the field of ICT and lay the foundations for promotion

of ICT in the region. Training in the development of networks infrastructure and their operation is of particular importance, and its quality is the crucial factor for efficient, reliable, competitive and secure network services based on ICT.

In the field of education and training the following actions should be taken:

- promote the system of continuing education for ICT teachers and ICT professionals;
- develop the system of certification of specialists;
- encourage the standard learning of ICT disciplines;
- encourage young people to study information technology (IT);
- government support and public funding of educational institutions providing training on IT.

Finally, in sectoral strategies on the development of mobile government (M-Government) in the Kyrgyz Republic, that encompass all areas of the government's liaison with citizens and businesses, it is necessary to take into account:

- Early large-scale SMS-notification during natural disasters, emergencies and armed conflicts;
- Targeted notification of persons in certain areas on government programmes or other public information;
- Notification of citizens by law enforcement agencies, including mobile fine tickets, SMS subpoenas;
- Crowdsourcing - citizens generate information on emergencies in when seeking access to assistance and aid from public services (for example, when citizens are caught in extreme situations, car accidents or terrorist or criminals attack, as well as reports on traffic jams or leaks in the system of public services);
- The use of mobile applications to access public services and use of mobile wallets to pay for them;
- Gaining access to government information through mobile applications of citizens;
- Using special SIM cards as a mobile passport, identity card or a wallet linked to a bank account (with recognition of the identity of the user through a telephone number);
- Personalisation, updates in vital records and presenting of tax reports using mobile applications;
- Identifying the location of citizens in accessing public services, such as emergencies call services.

Since the Kyrgyz Republic signed the Millennium Declaration, attitudes towards the achievement of the MDGs have changed significantly. There have been several reports on progress towards the MDGs and others that describe aspects of some of the MDGs – including the challenges related to institutionalization of these processes¹⁶⁷, and the integration of MDGs in national policies and strategies – that are testimony to these changes.

The target benchmarks on a number of indicators for MDGs 1, 7 and 8 have already been achieved, while the expert community has concluded that good progress is being made to achieve MDG4.

However, the attainment of a number of other targets is estimated to be unlikely, including in relation to MDG 1, for which progress had seemed unshakable, but recently has begun to reverse, and for MDG3. The situation with maternal mortality and combating HIV/AIDS is alarming.

The importance of this third MDG report is that it is an initial attempt to assess the lessons learned in the process of achieving the MDGs in the Kyrgyz Republic. Another specific feature of the report is that its drafting coincided with the process of National Consultations in the Kyrgyz Republic aimed to develop the post-2015 development agenda. This is an important point as the key conclusions of the Report on National Consultations¹⁶⁸ are crosscutting with the lessons learned on the MDGs. This report highlights the view of respondents that the main areas for future development are:

- 1) Economic growth and employment,
- 2) Government of a state.

Both of these areas are related to the lessons learned in the process of progress towards achieving the MDGs.

The issues related to the shortcomings of public administration are reflected in a number of lessons learned. Firstly, that it is necessary to institutionalize the process of progress towards MDG as soon as possible. Although the processes of institutionalization are multi-dimensional and complex, the fact that the Coordinating Committee on progress towards the MDGs was only created in 2008, suggests that the processes under assessment were not properly coordinated by the government in the early stages.

Secondly, the issue of poor public governance is manifested explicitly in the fact that the targets were set too high. The problem is not that – as in a number of cases – the benchmarks were adopted at the level achieved in the Soviet Union, during which time the situation in the social sector was superior, but that the government's capacity to anticipate global and internal shocks that disrupted the country's progress towards the benchmarks was insufficient.

Thirdly, lessons associated with the insufficient attention given to issues of strategic goal-setting in line with the MDGs fall under the same category. The MDGs cover all salient areas of society, but in many cases, the adopted strategies either neglected the incumbent commitments related to MDGs or acknowledged them only partly. Ideally, the strategic goals and targets of the country should be in line with the national MDG targets.

Fourthly, the methodology for assessing the contribution of key stakeholders in the process towards the progress was not developed. This concerns the government itself. The solution lies in implementation of budgeting based on the MDGs, which in turn is related to the introduction of performance-based budgeting approaches. The latter is the foundation for ongoing long-term reforms in the country, however, the issue of viewing MDG target benchmarks as the outcome of budgetary financing were never in focus as such.

The same lesson can be drawn in relation to monitoring and evaluation. There is still ambiguity in the methodology for evaluating some of the MDGs, testifying to the reality that a monitoring and evaluation system in line with the MDGs was to be created during the planning of the national MDGs. As this did occur, the shortcomings and constraints experienced by the national monitoring and evaluation system are exacerbated by the lack of attention to the MDG target benchmarks.

The lack of attention to the MDGs in a developing country was due to the government considering MDGs as a social burden, whereas in the current MDG paradigm there are very few issues directly related to economic development. In fact, it correlates with the second salient area of the Report on National Consultations which testifies to the need for economic growth and employment.

167 A study on the follow up of progress towards MDGs in four key areas

168 The Report following the National Consultations in the Kyrgyz Republic on the Development Agenda post-2015, NISR, Bishkek, 2013

In general, it is crucial whether the adopted system of target benchmarks is in line with the national interests of the country. However, during the implementation of interventions to achieve targets, it became apparent that greater flexibility should be ensured in tailoring the international definitions to the national context, while maintaining a specific basic set of international goals and objectives.

These lessons were discussed at the national conference, whereby the draft report was considered. A substantial number of

recommendations were received to clarify certain issues in the report. The authors, together with representatives from government ministries and agencies and United Nations agencies in the Kyrgyz Republic, participated in the process of drafting the report. This process testifies to the fact that the lessons learned in the process of achieving MDGs and the recommendations of the report will underlie the practical actions of government agencies, generating expectation that the negative trends will be suspended and a new impetus developed towards achieving the MDGs by 2015.

ASSESSMENT OF PROGRESS OF THE KYRGYZ REPUBLIC TOWARDS THE MDGS*

Goals and indicators	Current values	Target values	Progress assessment **
Goal 1. Radically Reduce Extreme Poverty			Successful
Extreme poverty rate (%)	4.4 (2012)	12.9	Achieved
Share of underweight children aged 1-6 years (%)	6.9 (2011)	3	Less likely
Share of population consuming less than 2,100 Kcal (%)	44.7 (2011)	27.7	Less likely
Goal 2. Achieve Universal Primary Education			Less likely
Literacy rate of population aged 15-24 years: boys (%)	99.7 (2011)	100	Less likely
Literacy rate of population aged 15-24 years: girls (%)	99.8 (2011)	100	Less likely
Ratio of students in primary school to total number of eligible children: boys (%)	97.6 (2011)	100	Less likely
Ratio of students in primary school to total number of eligible children: girls (%)	96.5 (2011)	100	Less likely
Goal 3. Promote Gender Equality and Empower Women			Less likely
Share of women among tertiary students (%)	51.2 (2012)	50	Likely
Ratio of women's-to-men's pay (%)	73 (2012)	100	Less likely
Share of women in economically active population (%)	46.5 (2012)	50	Less likely
Share of women among Members of Parliament (%)	20.8 (2011)	30	Likely
Goal 4. Reduce Child Mortality			Likely ***
Mortality rate of children under 5 per 1,000 of live births	23.4 (2012)	10.4	Likely
Infant mortality rate per 1,000 of live births	20 (2012)	8.5	Likely
Share of children vaccinated against measles (%)	97.6 (2012)	100	Less likely
Goal 5. Improve Maternal Care			Less likely
Maternal mortality rate per 100,000 of live births	54.8 (2011)	15.7	Less likely
Share of births attended by skilled personnel (%)	98.6 (2011)	100	Less likely
Share of pregnant women ill with anaemia (%)	64 (2011)	25	Less likely
Contraceptive coverage rate, % of women aged of 15-49	28.9 (2011)	31.2	*****
Goal 6. Combat HIV/AIDS, Malaria and Other Diseases			Less likely
Growing incidence of newly diagnosed cases of HIV/AIDS (%)	18.5 (2012)	Less than 20%	Less likely
Incidence of malaria, cases per 100,000 of population	1	0	Likely
Incidence of tuberculosis, cases per 100,000 of population	104.3 (2012)	52	Less likely
Deaths from TB, cases per 100,000 of population	8.6 (2012)	7	Likely
Proportion of treated TB cases under DOTS programme (%)	n/a	increasing	
Number of drug users (persons)	9,730 (2012)	1,200	Less likely
Incidence of brucellosis, cases per 100,000 of population	80 (2012)	12.8	Less likely
Goal 7. Ensure Environmental Sustainability			Likely
Area of forests as proportion of country area (%)	5.6 (2012)	6	Likely
Area of conserved territories, as proportion of country area (%)	61 (2012)	10	Less likely

Share of population with access to clean potable water (%)	92.4 (2011)	90	Achieved****
Share of population with sustainable access to sanitation (%)	25.4 (2011)	40	Less likely
Emissions of greenhouse gases, tons of CO ₂ equivalent per capita		3.14	Achieved
Consumption of ozone depleting substances, grams per capita		16	Achieved
Emissions of carbon dioxide per capita		2.4	Achieved
Goal 8. Develop a Global Partnership for Development			****
Amount of foreign debt as proportion of GDP (%)	479 (2012)	20	Less likely
Cost of servicing foreign debt as proportion of exports of goods and services	3 (2012)	8	Achieved
Unemployment rate among youth (%)	166 (2011)	-	-
Number of landline and mobile telephones per 1,000 of population	1,219 (2011)	-	-
Supply of computers per 1,000 of employees		-	-

* To assess the progress towards achieving the MDGs in the Kyrgyz Republic the methodology proposed in the Regional Report on Millennium Development Goals in countries of Europe and CIS was used. National Millennium Development Goals: a Platform for Action, UNDP Regional Office for Europe and CIS, 2006, p 125.

**The findings of the progress assessment include estimates of the time lag for achieving the target value, which is determined as the difference in the time remaining until the target year and the time required to achieve the target benchmark. The time required to achieve the goal is estimated pursuant to baseline, current and target values. If the index of time lag is negative, then the achievement by the country of the target benchmark – provided the current trends remain unchanged – is questionable.

*** Please see the respective section of the report as regards the methodological issues of identifying the value of the target benchmark

*** Despite the achievement of the quantitative indicator the quality of access to clean drinking water remains low. Please see the respective section of the Report.

**** Lack of target benchmarks on several indicators prevents a conclusion being drawn on the attainability of MDGs on the whole.

MILLENNIUM DEVELOPMENT GOALS MONITORING INDICATORS TREND

Indicator	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
General poverty rate (%)	62.6	56.4	54.8	49.9	45.9	43.1	39.9	35	31.7	31.7			
Extreme poverty rate (%)	32.9	24.7	23.3	17.2	13.4	11.1	9.1	6.6	6.1	3.1	5.3	4.5	4.4
Share of underweight children aged 1-6 years (%)	6.6	6.6	12.4	7.8	6.7	5.6	6.1	5.2	6.5	4.6	7.4	6.9	
Share of population consuming less than 2.100 Kcal (%)	60.5	77.2	51.4	55.2	48.2	49.5	47.6	48.5	45.2	40.7	42.3	44.7	
Literacy rate of population aged 15-24 years: boys (%)	99.47	99.47	99.47	99.47	99.47	99.47	99.47	99.47	99.47	99.7	99.7	99.7	
Literacy rate of population aged 15-24 years: girls (%)	99.61	99.61	99.61	99.61	99.61	99.61	99.61	99.61	99.61	99.8	99.8	99.8	
Ratio of students in primary school to total number of eligible children: boys (%)	96.6	95.5	94.9	94.9	95.4	96.2	96.1	97.8	98.4	97.1	96.9	97.6	
Ratio of students in primary school to total number of eligible children: girls (%)	95.1	94.4	94.2	94.6	94.5	95.6	96.0	97.3	98.3	96.3	96.2	96.5	
Share of women among tertiary students (%)	50.7	52.9	54	53.9	55.2	55.6	56.1	56.3	55.7	55.0	53.7	54.0	51.2
Ratio of women's-to men's pay (%)	67.6	63.1	64.9	64.1	66.6	62.5	65.8	67.3	67.3	63.9	63.6	78.4	73
Share of women in work force/economically active population (%)	45.3	45.4	44.0	44.1	43.1	42.9	42.4	42.2	43	42.3	41.9	41.8	46.5
Share of women- Members of Parliament (%)	6.7	6.7	6.7	6.7	6.7	0	0	25.6	31.1	25.6	23.5	20.8	
Mortality rate of children under 5 per 1.000 of live births	33.2	29.5	29.0	27.7	31.8	35.1	35.3	35.3	31.5	29.3	26.5	24.5	23.4
Infant mortality rate per 1,000 children of live births	22.6	21.7	21.2	20.9	25.7	29.7	29.2	30.6	27.1	25	22.8	21.1	20.0
Share of children immunized against measles (%)	97.8	98.0	99.7	99.3	99.3	98.9	97.3	98.8	99.1	98.9	98.3	97.2	97.6
Maternal mortality rate per 100,000 of live births (%)	45.5	43.8	53.5	49.3	50.9	60.1	55.5	51.9	55	63.5	51.3	54.8	
Share of births attended by skilled personnel (%)	98.6	98.7	98.8	98.9	98.2	97.9	98.4	98.4	98.5	98.5	98.3	98.6	
Share of pregnant women ill with anaemia (%)	54.7	56.2	43.7	53.9	52.4	47.4	52.0	52.2	52.9	54.4	53.5	64.0	
Contraceptive coverage rate, proportion of women at age of 15-49 (%)	39.9	33.1	29.4	41.2	42.3	38.2	39.4	35.9	33	31.2	30.1	28.9	
Number of newly diagnosed cases of HIV. (persons)*	53 ¹	149	160	132	161	171	244	409	698	687	554	594	704
Total number of HIV-positive persons*	53	202	362	494	655	826	1070	1479	2718	n/a	n/a	n/a	
Incidence of malaria. cases per 100,000 of population	0.2	0.6	55.3	9.3	1.9	4.4	6.2	1.8	0.3	0.1	0.04	0.8	1
Incidence of TB. cases per 100,000 of population**	150.9	167.8	147.7	138.2	129.2	125.3	121.2	115.5	106.3	103.9	101.1	100.4	104.3

Deaths from TB. cases per 100,000 of population**	20.8	23.7	20.1	18.2	15.9	15.4	16.1	13.5	11.8	11.0	11.1	11.6	8.6
Number of drug users (persons)	4459	5043	5591	6327	6814	7216	8353	8734	9505	10417	10678	11074	9730
Incidence of brucellosis. cases per 100,000 of population	24.9	36.9	35.7	50.3	43.9	55.9	77.4	77.5	73.0	67.4	73.0	80.0	80.0
Area of forests as proportion of total area of country (%)	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.2	3.2	3.2	3.2	5.61
Area of conserved territories, as proportion of country area (%)	1.7	1.9	2.0	2.2	2.2	2.2	2.7	2.7	2.7	3.5	3.5	3.5	6.1
Share of population with sustainable access to clean potable water (%)	86.0	84.0	84.2	78.6	81.0	84.4	89.8	93.0	90.4	90.4	91.5	92.4	
Share of population with sustainable access to sanitation (%)	32.8	31.4	30.3	25.9	27.0	23.9	23.9	24.2	23.5	25.2	26.4	25.4	
Greenhouse gas emissions, in tons of CO ₂ equivalent per capita	3.14	-	-	2.20	2.30	2.19	-	-	-	n/a	n/a	n/a	
Consumption of ozone-depleting substances. grams per capita	16	-	-	12.2	10.5	6.4	4.88	0.96	-	n/a	n/a	n/a	
Emission of carbon dioxide, in tons per capita	2.38	-	-	1.58	1.64	1.58	-	-	-	n/a	n/a	n/a	
Foreign debt as proportion of GDP (%)	101.9	94.2	98.3	91.9	88.3	75.6	69.4	54.3	40.6	53.7	55.4	47.5	47.9
Cost of servicing foreign debt as proportion of exports of goods and services (%)	-	-	-	7.2	6.5	6.4	4.9	3.3	2.8	3.2	3.6	2.8	3.0
Unemployment rate among youth (%)	-	-	20.1	15.4	15.2	14.5	14.6	13.2	14.8	16.8	16.7	16.6	
Number of landline and mobile telephones per 1,000 of people	79	85	95	107	134	191	319	504	738	881	1053	1219	
Supply of computers per 1,000 of employees	-	-	-	105.6	121.7	143.2	170.8	193.8	-	n/a	n/a	n/a	

