

National Development Strategy for the Republic of Tajikistan to 2015

(First draft)



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Abbreviations and Acronyms

AIC	Agro-industrial complex
CIS	Commonwealth of Independent States
DFI	Direct foreign investment
EFA	Education for All
EU	European Union
GBAP	Gorno-Badakhshan Autonomous Province
GDP	Gross domestic product
GNP	Gross national product
HIV	Human immune deficiency virus
IT	Information-communications technology
MDGs	Millennium Development Goals
MTC	Ministry of Tax Collection of the Republic of Tajikistan
MTPB	Medium-term budget programme
NAR	Nationally administered regions
NDS	National Development Strategy
NGO	Nongovernmental organisation
OMI	Obligatory medical insurance
PMHA	Primary medical hygiene assistance
PRS	Poverty Reduction Strategy
SIP	State Investment Programme
SME	Small and medium business
STDs	Sexually transmitted diseases
TAF	Tajik Aluminium Factory

<u>UN</u>	<u>United Nations</u>
<u>UNDP</u>	<u>UN Development Programme</u>
<u>UNICEF</u>	<u>UN Children's Fund</u>
<u>WHO</u>	<u>World Health Organization</u>
<u>WTO</u>	<u>World Trade Organization</u>
<u>\$US</u>	<u>US dollars</u>

1. Introduction

This document provides an overview of the Republic of Tajikistan in relation to its long-term development and the directions of action required to realise projected economic reforms. The goal of these reforms is to guarantee a stable high rate of economic growth and thereby reduce poverty levels, with the aim of achieving the Millennium Development Goals (MDGs).

The basic projected reforms and actions are necessary for the formation of a democratic, strong, and prosperous state in Tajikistan, where all citizens will benefit equally from political, social, and economic development. To accomplish these goals requires a complex approach to renewal and development of political institutions, social welfare, and economic potential. Government administration will be reformed to guarantee its effectiveness on the basis of the rule of democratic principles and laws. State politics will be oriented towards achieving an improvement in the standard of living, a reduction in poverty, a guarantee of social protection for disadvantaged segments of the population, and the healthy development and education of the coming generation.

Duplication and lack of a strong commitment to earlier approved strategic programmes—the Poverty Reduction Strategy (PRS) for 2002–2006, the Economic Development Programme to 2015, the medium-term budget programme, the State Investment Programme (SIP), and other departmental and regional programmes not always integrated into the state budget—together with the lack of clearly expressed national priorities within these programmes, resulted in the dissipation and inefficient use of domestic resources, foreign aid, and administrative potential.

In 2000 Tajikistan joined 191 other countries in signing the UN Millennium Declaration, and undertook a series of measures that demonstrated the seriousness of its intentions to achieve the MDGs. The goals were adopted as the main aims of the PRS (2002–2006), which became the Tajikistan government's basic strategic document.

To work out the necessary reforms in 2003, the Government of Tajikistan and the UN Country Group prepared a joint report, *Movement Towards the MDGs*, which looked at the possibilities of achieving each of the tasks of the PRS. By May 2005, with the participation of international organisations, country donors, and civil society, an evaluation of the requirements to carry out the PRS was prepared, which allowed the Government to formulate specific institutional reforms and evaluate the finance needs of each social sector.

In 2005, with the aim of raising the standard of living, the President of Tajikistan initiated the formation of a long-term National Development Strategy (NDS) to 2015 and a medium-term Poverty Reduction Strategy for 2007–2009 (PRS 2007–2009).

In this regard, the Government created sectoral working groups to deal with the following goals:

1. reform of the state administration;
2. macroeconomic development;
3. improvement of the investment climate and development of the private sector and entrepreneurship;
4. regional cooperation and integration into the world economy;
5. food security and development of the agro-industrial complex (AIC);
6. development of infrastructure, communications, energy, and industry;
7. development of the health care system;
8. development of education and science;
9. broadened access to water, sanitation, and housing;
10. strengthened social protection of the population;
11. guarantee of gender equality;
12. guarantee of ecological sustainability.

Sectoral working groups headed by officials from executive organs carried out the analysis and evaluation of Tajikistan's potential for further growth and for improvement in the standard of living. The general coordination of all groups was carried out by the Coordination Council under the Prime Minister. The UN Development Programme (UNDP) guaranteed general consultation and technical help.

The conception and overview of the NDS involved a wide circle of state and private experts drawn from civil society, international organisations, and donors, and were twice discussed at the UN headquarters in New York in September and December 2005. In November 2005 the first presentation of the sectoral divisions of the NDS was conducted by working groups, and between November 2005 and February 2006 a broad discussion (in the form of seminars) was conducted with the participation of ministries, institutions, and international donor organisations.

In order to systematise priorities at the national level under the State Adviser to the President of the Republic of Tajikistan for Economic Policy, a working editorial group was set up in February 2006.

As a result, the sectoral divisions of the NDS are divided into three blocks in accordance with their role and place in the achievement of the national goals:

- (a) *The functional block* deals with the institutional and functional conditions for economic growth and poverty reduction and includes reforms of state administration; macroeconomic development; improvement of the investment climate, development of the private sector, and entrepreneurship; and regional cooperation and integration in the world economy.
- (b) *The production block* deals with the material conditions of economic growth and includes food security and development of the agro-industrial complex (AIC), and development of infrastructure, communications, energy, and industry.
- (c) *The social block* deals with broadening access to basic social services; development of the health care system; development of education and science; broadening access to water, sanitation, and housing; and concern for gender equality and ecological stability.

Before preparation of the final version, additional discussion of the draft NDS took place in May 2006 in the framework of social hearings and regional meetings with local authorities and the media.

The NDS is a new, very different development strategy, one that takes into account the experience of working out and executing the earlier documents dealing with the realities and prospects of development of the country.

The new document, prepared by the sectoral working groups and incorporating input from international organisations and local NGOs, contains analysis of the current situation and of the challenges related to achieving the national development goals. In addition, the NDS sets out national goals, principles, priorities, approaches to financing, and basic direction of actions to 2015.

Thus the NDS is the principal long-term strategic document of Tajikistan. It will form the basis for the creation and prioritisation of all current and prospective state, departmental, and regional plans, strategies, and programmes, as well as for the activity of all organs of state administration.

The main directions of action established in the NDS will be concretised and executed in the format logically deriving from the medium-term PRS worked out by the Government for each three-year period, as well as by other sectoral and regional programmes and plans. In contrast to the NDS, each regular PRS will include an analysis of the preceding activities of the Government to reduce poverty in Tajikistan. The PRS will contain concrete actions and evaluations of expenditures connected with the medium-term budget programme, and procedures for conducting monitoring and evaluation. The medium-term PRS will be more focussed; it will specify foreign aid and the responsibilities of the Government for executing the measures decided on.

The NDS is the basis for working out all areas of development and the regional strategies, programmes and plans (including the PRS). It is also the instrument for dialogue with all interested parties, including business and NGOs. Therefore, the Government will ensure that all necessary background studies and statistics of the NDS are provided while working out programmes of technical and financial assistance to the country.

2. Stages and Basic Challenges of Economic Development of Tajikistan

By 1992 Tajikistan had practically no functional state institutions in any spheres of the country's political, economic, or social life. The fierce civil war of 1992–1997 finally ended, but it aggravated the problems of poverty, and large-scale market imbalances appeared. Therefore, the Government's primary post-war goal was to restore state institutions and basic economic mechanisms, including the main mechanism of private ownership.

By the late 1990s the basic problems had been solved: the primary political institutions had been created, the key moment being the adoption of the Constitution; general macroeconomic stabilisation had given the country a reasonably stable currency, and a balanced budget had been achieved; and the process of privatisation of state enterprises and the transition to a market economy had been accelerated.

The next stage, from 1999 to 2004, was a time of reconstruction and economic growth; strategic problems began to get solved. Increasing efforts to maintain macroeconomic and political stability, the Government concentrated its attention on reducing poverty and creating economic institutions characteristic of a modern market economy and a democratic society. Civil codes, tax codes, and customs regulations were adopted. The legislation addressing bankruptcy of enterprises, state registration, and licensing was updated. Work began in a number of policy areas, including modernising the public administration, improving bank legislation, and restructuring large enterprises and natural monopolies.

At the same time, analysis of the reforms shows that creation of the necessary legal infrastructure has been hampered by inefficient law enforcement. Practical realisation of policy decisions has not gone far enough; it requires better analysis and control by the Government.

To accomplish this, each reform must be accompanied by concrete actions comprising precise dates for implementation of legislation, and quantitative normative indicators for the activity of the ministries and departments in the areas where reforms have been initiated.

This kind of planning is especially necessary because of the objective factors limiting business activity in Tajikistan: (1) absence of an outlet to the sea; (2) remoteness from advanced global centres; (3) lack of its own

accessible oil and gas deposits; (4) natural-geographical fragmentation of the country into regions; (5) the small size of the domestic market.

There are calls now for stable and long-term economic growth, and also for reduction in the poverty level in Tajikistan.

Below are some of the challenges the country faces:

Government inefficiency. The major state institutions—administrative, judicial, and law-enforcement—are inefficient. The mechanisms of decision-making by state bodies remain complex and opaque; effective mechanisms for civil control of economic activities are not developed. On the one hand, the intervention of state bodies of all levels, including law enforcement bodies, in economic activities is a serious problem. On the other, the state does not provide sufficient services in these areas.

Weak investment climate. In comparison with other neighbouring states, Tajikistan is not in the best position to attract internal and external investments. This is partly because of its geographical location, coupled with especially adverse economic factors. The principal problem is the weak investment climate, caused by corruption and the presence of excessive administrative barriers, insufficient development of public and private infrastructure, and overly slow reforms dealing with key economic problems (labour productivity; competitiveness and profitability of agriculture; development of the private sector, including small and medium businesses (SMEs); and licensing, control, and simplification of regulations).

Low level of competition and high share of the non-market sector. The share of the non-market sector is still high. In some regions there is artificial competition with the market sector, which results in reduced incentive and adoption of inadequate decisions by the Government. The majority of the branches of the economy are characterised by a low level of competition and unregulated activity by natural monopolies. State enterprises that operate in the market environment are a large element of the non-market sector, and benefit from overt or concealed privileges. Restructured agricultural enterprises are considered de jure market subjects; however, de facto, they are limited by the intervention of state structures and lack of freedom. In addition, labour out-migration is poorly recorded and not adequately taken into account in Government statistics and policy.

Infrastructural restrictions of growth. Development of the economy is complicated by problems related to development of the general infrastructure (transport, power, tele-communications, water supply, and sanitary systems) and private infrastructure (banking and insurance, equity market, leasing, communications). Measures taken to increase investments in these sectors are insufficient. Partly this derives from lack of institutional conditions capable of providing transparency of investment decision-making, lack of control over expenditure of funds, and the absence of an advanced system of partnership between the private and state sectors.

Insufficient stimulus for development of human capital. Tajikistan's population lacks sufficient access to quality education and to medical and social services, caused by the following: a delay in the establishment of minimal state social standards; slow rates of reform in the areas of health, education, and social security; lack of state guarantees of medical aid; lack of educational standards; lack of social support measures; and poor results from attempts to alleviate these problems. These factors have long-term negative consequences for Tajikistan's development. Along with the decrease in people's incomes, there has been a decrease in the level of human capital development, aggravated by a distrust of foreign management and experience and low incomes for labour migrants.

Problems of external migration. A high population-growth rate, lack of jobs, and the weak investment and entrepreneurial climate compel citizens to migrate to other countries in search of work, which subjects them to dangers and deprivations and results in lost potential for the national economy. Remittances of labour migrants play a significant role in the national economy; however, introduction of simplified procedures for acquiring citizenship in countries where they work could lead to a direct reduction of the

working-age population in Tajikistan (especially of qualified personnel and young workers). There is also the problem of providing protection for the rights and freedom of Tajik labour migrants abroad.

Poor implementation of reforms in the provinces. Centralisation of the state budget, absence of local sources of income for provinces and districts, and insufficient legislation providing for the rights and powers of local government authorities and institutions all interfere with implementation of reforms in the provinces. In turn, this poor implementation hinders district efforts to find effective ways to promote competitiveness, increase investment, and build up the labour pool. As a result, problems in the provinces persist.

Low productivity, inter-regional cooperation, and poor international integration of the economy.

Participation of Tajikistan in the international economy is characterised by low diversification of manufacturing and export; low use of competitive advantage in export of products with a high value added; and poor transport, medical, and educational services (at least at a regional level). Limited transboundary cooperation reduces opportunities for transportation, exchange of technologies, and dynamic development of domestic manufacturing. Though labour migration is high and its contribution to economic growth is significant, limited state support of this process reduces its efficiency and raises the level of risk for migrants. Despite some positive developments, the national economy is still dependent on cotton, aluminium, and electric power for exports. Dependence on this limited number of export sources makes the economy very sensitive to external shocks caused by fluctuations of price and demand for these exports on international markets.

Inefficient structure of the national economy. The inefficient structure of the national economy means low rates of productivity and low rates of privatisation (including the privatisation of land); reduction of the share of the real sector in the structure of gross national product (GNP); limitation of export opportunities; high vulnerability of macro parameters to the vagaries of foreign trade; and the insignificant contribution of micro, small, and average-sized enterprises to the national economy. Most small businesses operate in the informal economy; they are not registered and do not pay taxes.

Economic inefficiency is exacerbated by the low level of technological innovation in business. The absence of effective ties between science and manufacturing, along with the weak investment climate, mitigates against effective competition in the high-value-added, hi-tech sectors.

Inadequate execution of laws, maintenance of human rights, and development of a civil society.

Development of the country requires an advanced civil society. It will not be achieved without the rule of law and the establishment of the rights and freedoms of the individual. Most of the problems in this sphere are to some extent caused by imperfect legislation with insufficient mechanisms for its realisation, and by the strict limits imposed on structures of civil society. Thus, a hostile environment for the development of citizen-led initiatives is created, reducing investment and entrepreneurship.

All these challenges create an uncertain climate for further developing the national economy.

Fundamental corrective measures must be introduced into the social and economic policy. All strategic documents must take into account the following necessary conditions for modern economic growth.

First. Tajikistan must achieve not simply high rates of economic growth, but growth that provides progressive structural shifts in the national economy. The NDS assumes development of instruments for economic growth that satisfy the following four criteria: (1) high growth rates; (2) progressive structural shifts, including expansion of the share of the private sector, thus providing diversification and increasing competitiveness; (3) improvement and stability in the medium-term and long-term prospects of the country; (4) coordination with the level of economic development in neighbouring countries.

Second. The country has reached the point where further economic development will be determined by local self-management and the condition of governmental institutions. Solving the current economic problems of Tajikistan requires not only the help of economic tools and institutions, but also reforms outside the

economic sphere. The system of law enforcement, especially the judiciary and police, is a real bottleneck. The steady functioning of the economy requires an effective control system to be created, and transparent judicial and law-enforcement systems, at both national and provincial levels.

Third. A long-term priority is reform relating to human resources: education, public health services, and social protection of the population. This is an obvious requirement for improving the present and long-term prospects of the country with respect to the human factor, and the key for maintenance of high and steady economic growth.

Fourth. Implementation of any actions for social and economic development of the country should not undermine the current level of macroeconomic stability. Monetary and financial stabilisation has been the policy of the past decade. A primary force for maintaining macroeconomic stability now will be the Government's adherence to a balanced-budget tax policy, thereby strengthening the rate of the national currency (somon) and reducing inflation.

Fifth. Radical improvement of the institutional system is necessary to achieve the targets the Government sets. Thus, the NDS pays special attention to creating a new institutional structure. Establishing exact and clear 'rules of the game' for all parties concerned is fundamental for achieving social and economic development that is based on democratic principles and the requirements of the market economy.

Decisions taken by the authorities must be predictable and clear to the people; they must correspond to the spirit of the democratic Constitution. Trust is the major condition for maintaining competitiveness in the modern economy, as is the key factor of decreasing transaction costs, which negatively affect the competitiveness of business in Tajikistan.

Sixth. Development of separate sectors of the economy, creating added value, is increasing and requires Government support. Thus, part of the NDS is devoted to working out development strategies that take into account the state's social and economic policies.

3. Role of the National Development Strategy in the System of National Development

Development of the NDS is based on the search for effective ways to improve the national development process and reduce poverty, using specific development goals and priorities, systematising all strategic programmes, and using a multifaceted approach in dealing with the tasks set.

The strategy must:

- Consolidate Tajikistan's goals into a uniform structure in order to systematise development priorities, and provide vertical and horizontal coordination between both state and local economic planning while taking into consideration the priorities of various sectors; and
- Unite the efforts of all partners in development of the country while taking into account their role and opportunities.

Achieving success requires precise analysis of Tajikistan's strengths and prospects, clear designation of priorities, and concentration of efforts and resources in strategic directions. Institutional and organisational reforms must be executed with a view of eliminating shortcomings in the System of National Development (see discussion below).

The NDS is based on institutional (connected with research into problems and preconditions), systemic (considering the interactions of 'business', 'government', and 'population') and methodological approaches, and on principles of stable development.

The NDS is a strategic document that sets out the development problems and priorities of the country in the long term, and all development partners should focus their programmes and plans on these priorities. All short-term policy documents of the Government as well as other documents concerning development should proceed from the priority directions of the NDS.

Successful realisation of goals requires determining what measures are needed to achieve the goals and how those measures should be carried out. It also requires that the structures put in place to realise those goals be given appropriate authority and operate efficiently. Measures for realisation of the NDS in the medium term

should be reflected in the medium-term PRS and integrated into the medium-term budgetary program, the Programme of State Investment (PSI), and medium-term programmes of external aid by donor organisations.

According to estimates of international experts, the present operational system does not meet the requirements of standard norms of management on national development. Goals, challenges, programmes, and plans are not coordinated or vertically integrated; potential partners in development management (the private sector and civil society) are not involved in this process. The administrative system of the Government and its human resources do not meet the requirements of the market economy and the System of National Development. The poor distribution of financial resources allocated to NDS priority areas complicates an already complex system.

That is why it is necessary to create a System of National Development with clear and systemic goals based on the following: correspondence of strategic documents between different levels of government; coordination of programme goals and tasks; and review and monitoring of their performance on the one hand, and corresponding administrative structures for management of the process—both vertical and horizontal on the other (see Appendix)—on the other.

The System of National Development is a network of vertical administrative processes and horizontal coordination of partners in development; that is, it is a continuous process or cycle that consists of determining the national targets, acceptance and development of strategic decisions, planning national development, creation of policy and planning of sectoral policies, realisation of plans, evaluation of execution, and feedback.

In order to systematise the process of national development and give it an integrated approach and sequence, it must be re-examined and reformed in accordance with the requirements of the NDS and with the priorities of the accepted national, branch, and regional strategy programmes.

It is necessary to reconsider the organisational control system for development, which consists of administrative bodies and their functions and tasks (Appendix). The basic stages of creation of this system are reflected in the 'Strategy for Reforming the System of Government, by the Decree of the President of Republic Tajikistan dated 15 March 2006, No. 1713'. Realisation of the Strategy will be an important stage in improving the administration and systematisation of the development process.

The System of National Development assumes the introduction of a uniform vertical network of strategic documents, as well as national, branch, and regional programmes and plans. Management of this process should involve participation of all partners in development. In order to optimise the process of reform and strengthen coordination in achieving the strategic aims, it is very important to take into account the above-stated problems in the System of National Development.

In creating a new economic order, effective administrative control, the further democratisation of society, and formation of a modern civil society must be given key roles.

The success of the Strategy depends on

- Skills to work through problems viewed through the prism of development in various directions—productive and social sectors, environment and management, at national and local levels.
- Organisational structures providing for interaction between partners, priorities, and planning within the framework of the System of National Development.

4. Concept, Goals, Priorities, and Principles

The concept, goals, priorities of development, and principles for Tajikistan's National Development Strategy (NDS) have been developed from established conditions and from challenges for the economic growth of the country in its experience of market-reform transition.

4.1 Concept

The people of Tajikistan will strive to create a prosperous state in which all members of society are able to make use equally of the achievements of political, social, and economic development. The concept assumes a complex approach to update and develop political institutions, social benefits, and economic potential. State administration will be reformed, relying on democratic principles and the law to improve its efficiency.

At the same time, national policy will be directed towards improving the quality of life for all citizens. The poverty level will be reduced, and social protection will be provided for vulnerable segments of the population. The healthy development and education of children will be ensured. Youth will have the opportunity to develop their potential. All able-bodied women and men will have the opportunity to realise their aspirations, as comprehensive social and economic development capable of satisfying their material and spiritual needs (in the name of the future development of the country) will be in place. Tajikistan will then hold a worthy position in the world community.

The NDS of the Republic of Tajikistan is intended to implement this concept by 2015.

4.2 National goals

On the basis of this general concept for the country's long-term development, the following national goals have been determined: *to preserve political stability, and to achieve the economic and social well-being of the citizens of Tajikistan based on principles of freedom, human dignity, and equal opportunity for the realisation of the potential of every person.*

4.3 Development priorities

Effective and transparent government, a fair society providing for social protection and human development, and steady economic growth are the basic components of the overall goal. To achieve this objective, national long-term priorities of development must be determined. Taking into account the challenges of economic development in order to achieve the key macro parameters of economic development, as well as the parameters of the Millennium Project, these priorities are (in order of importance):

1. Reform of the Government
2. Development of the private sector and attraction of investments
3. Development of people's potential

4.4 Principles

Reform and development of economic systems, as a rule, demand a long time. Successful economic reform takes into account the features specific to a country: the level of its economic development; its political system, history, and traditions; its geography, including administrative-territorial divisions; and its rates and the sequence of transformations during any transition period.

As global experience shows, there is no uniform, optimal model of economic development in the world, but there are laws necessary for carrying out reforms. Basic principles of the theory and practice of development must be adhered to within the framework of a uniform strategy.

The general principles of Tajikistan's NDS are the following:

- The targets, priorities, and basic direction of actions of the NDS are a basis for all other documents of social and economic policy, and also a reference point for aid programmes.
- All branch and regional policies and all approved programmes and plans should be brought into conformity with the NDS.
- The NDS aims to create a system of national development, by improving the status and functions of central and local state bodies and the institutions of civil society.
- The NDS requires transparency and openness of state administration, involvement of civil society in the process of policy formation, evaluation of results at national and local levels, and maintenance of democratic control over administration.

4.5 Key NDS indicators

To measure the progress of implementation of the NDS and Millennium Project macroeconomic parameters, the following quantitative key indicators (Tables 1 and 2) are presented. They were designed on the basis of forecasts and estimations. In Table 1, key macro parameters are shown according to three variants, calculated according to the interaction of the foreign market (Variant I), volumes of external and internal investments (Variant II), and the level of external aid (Variant III).

Table 1: Key Macroeconomic Indicators of the National Development Strategy

	Unit	2005	Variant I		Variant II		Variant III	
			2010	2015	2010	2015	2010	2015
Population (end of year)	1000 people	6,919.60	7,690.10	8,510.80	7,690.10	8,510.80	7,690.10	8,510.80
Nominal GDP	mln somoni	7,201.10	12,891.00	23,077.00	14,167.00	27,871.00	15,540.00	32,775.00
	mln US\$	2,310.60	3,238.30	4,542.30	3,634.30	6,861.70	4,345.00	8,069.00
Nominal GDP per person	somoni	1,051.30	1,676.30	2,711.50	1,842.20	3,274.80	2,020.80	3,851.00
	US\$	337.30	421.10	533.70	472.60	806.20	565.00	948.10
Real GDP, 2005 prices	mln somoni	7,201.10	9,191.00	11,730.00	10,100.00	14,166.00	11,080.00	16,661.00
Average annual increase of GDP for 5 years	%	109.60	105.00	105.00	107.00	107.00	109.00	108.50
Real average increase of GDP for 5 years	%	57.90	27.63	27.63	40.26	40.26	53.86	50.37
Index deflator of GDP (annual average for 5 years)	%	20.40	7.00	7.00	7.00	7.00	7.00	7.00
Average annual inflation for 5 years	%	10.65	6.00	5.00	6.00	4.00	5.50	3.00
Ratio of consumption to GDP	%	80.60	80.20	79.80	79.50	79.20	78.80	78.00
Ratio of investment to GDP	%	17.50	17.80	18.00	18.20	18.50	18.80	20.00
Ratio of domestic investments in fixed capital to GDP	%	8.57	12.00	11.00	12.00	11.00	12.00	11.00
	somoni	617.30	1,547.00	2,539.00	1,700.00	3,066.00	1,865.00	3,605.00
Gross domestic savings as per cent of GDP	%	6.80	7.40	9.50	9.40	12.20	12.70	15.20

Export of goods and services to GDP	%	39.6	48.1	52.4	56.3	58.6	58.9	62.7
Import of goods and services to GDP	%	57.6	65.5	69.7	64.9	62.3	58.1	55.8
Ratio of net exports to GDP	%	-18.2	-13.6	-12.7	-9.5	-8.0	-2.4	5.3
Ratio of current operations to GDP	%	-4.9	-3.0	-1.7	-2.0	0.8	-0.2	2.0
Reserves (in months) of export	months	2.0	2.3	2.2	2.2	3.0	3.1	4.5
Monetary aggregate M2 to GDP	%	7.9	9.1	11.2	9.5	12.0	10.7	15.6
Official rate in somoni to 1 US\$	somoni	3.1175	3.9808	5.0805	3.8981	4.0618	3.5765	4.0618
Revenues to GDP	%	18.1	20.0	21.5	20.0	21.5	20.0	21.5
	somoni	1300	2,578	4,962	2,833	5,992	3,108	7,047
(including tax proceeds to GDP)	%	16.6	18.5	20.0	18.5	20.0	18.5	20.0
	somoni	1,195.2	2,385	4,615	2,621	5,574	2,875	6,555
Ratio of expenditures (without foreign financing of SIP) to GDP	%	18.3	20.5	22.0	20.5	22.0	20.5	22.0
	somoni	1,318.1	2,643	5,077	2,904	6,132	3,185	7,210
Deficit (-)	%	-0.3	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Ratio of public debt to GDP	%	38.8	45.5	43.2	42.5	41.7	41.2	40.5
Ratio of debt payments to GDP	%	2.1	2.4	1.8	2.2	1.4	2.2	1.3
Ratio of debt servicing to GDP	%	3.2	2.0	1.6	2.0	1.3	2.0	1.2
Estimation of real unemployment rate, in percentage with respect to employable citizens	%	30	30	27	27	25	25	20

Table 2: Key Socio-economic Indicators of the National Development Strategy (for Achieving the Millennium Project)

Targets of the Millennium Strategy	Indicator of the National Development Strategy	2003	2010	2015
1. Poverty and hunger reduction	Poverty index in SIP \$2.15 a day (%)	64	53	41
	Malnutrition (children up to 5 years, %):			
	• acute form	7.6 (2004)	5.5	3.8
	• chronic form	31.4 (2004)	26.0	20.9
	Iodine deficit (goitre disease, %):			
	• children up to 5 years	64.0	45.1	32.0
	• women of child-bearing age	60.0	42.5	30.0
	Anaemia (%):			
	• children up to 5 years	37.0	26.5	18.5
	• women of child-bearing age	48.0	34.0	24.0
2. Provision of elementary education	Vitamin A deficiency, children up to 5 years (%)	51.8 (2002)	36.4	25.9
	General index of school attendance (%)	88.0 (2004)	91.0	99.0
	Education level of population 15 to 24 years (%)	88.4 (2004)	95.0	99.1
3. Encouragement of equality of men and women	Proportion of boys to girls in schools (%):			
	• in elementary classes (1 to 4)	52.0/48.0	52.0/48.0	52.0/48.0
	• in primary classes (5 to 9)	54.4/45.6	53.4/46.6	53.0/47.0
	• in secondary classes (10 to 11)	53.5/46.5	53.4/46.6	53.1/46.9
	Proportion of literacy of population 15 to 24 years (%)	98/100	99/100	100/100

Table 2 (continued).

Targets of the Millennium Strategy	Indicator of the National Development Strategy	2003	2010	2015
4. Reduction of child mortality	Infants (per 1,000 live births)	89	68	29.6
	Mortality among children up to 5 years (per 1,000 live births)	118	80	39.3
5. Maternity care	Maternal mortality (per 100,000 live births)	120	70	30
6. Control of HIV/AIDS, malaria and other diseases	HIV/AIDS (people)	454 (2005)	2500	Not more than 6,800
	Malaria rate (per 100,000 people)	80.7 (2002)	50.0	20.0
	Tuberculosis rate (per 100,000 people)	127 (2004)	146	125
	Helminthiasis sickness rate (per 100,000 people)	292.9 (2004)	Not more than 292.9	198
	Inoculation coverage rate, children under 1 yr (%)	95	98	98
	Measles sickness rate (per 100,000 people)	31	0	0
7. Maintenance of ecological stability	Share of population using solid fuel (%)	32.2 (2002)		
	Provision of urban households with drinking water (%)	92 (2004)	96	97
	Provision of rural households with drinking water (%)	45 (2004)	64	74
	Access to basic sanitation in cities (%)	42 (2004)	47	50
	Access to basic sanitation in villages (%)	3 (2004)	37	65

5. Creation of Institutional Conditions for Economic Growth (Functional Block)

The functional sectors of the NDS—reform of the Government, macroeconomic development, improvement of the investment climate, development of the private sector and business, regional cooperation, and integration in the world economy—are intended to set the institutional and functional conditions necessary for stimulating economic growth and reducing poverty.

Joint planning of sectoral priorities and actions within the sector as a whole reduces departmental disagreements, strengthens effectiveness, and coordinates planned actions.

5.1 Current economic situation and main problems

In recent years, Tajikistan has experienced high rates of social and economic development. In the period 2001–2005, the average annual rate of GDP growth was 9.5 per cent. Factors contributing to this were post-conflict restoration of manufacturing, and expansion in the spheres of industrial production, services, and construction, especially agriculture, due to remittances of labour migrants and favourable prices for the country's basic exported goods, cotton and aluminium.

Prudent macroeconomic policy has resulted in rapid growth. Due to balanced monetary and credit policy, inflation in the period 2001–2005 decreased from 12.5 per cent to 7.1 per cent, the exchange rate was stabilised, and trust in the national currency, the somoni, increased. In 2003–2005, exports grew by 14 per cent, mostly due to increased sales of aluminium. Imports increased by 51 per cent, because of the increased requirements in the home market provoked by growth of remittances, which now make up approximately 30 per cent of the GDP. Deficits in current accounts increased from 1.3 per cent in 2003 to 4.9 per cent of the GDP in 2005.

Progress in key directions of public finance was achieved. A legal foundation for tax and budgetary regulation was created in the republic in a very short period of time. The tax code began to function, and a new, improved version was adopted. Laws on public finances were passed. The National Treasury was created, and budgetary organisations switched to financing through a uniform currency account.

In 2000, Tajikistan switched to a budgetary classification of incomes and expenses, determining the structure of the budget by the functional and economic principles of distribution. In the budget, the ratio of incomes to

GDP, which had been 14 per cent in 2000, increased to 18.1 per cent in 2005. This allowed the Government to deal with outstanding debts and helped stop the growth of the state budget deficit, while providing for fulfilment of the country's external obligations. A decrease in the level of the external debt from 108 per cent of GDP in 2000 to 39 per cent in 2005 was achieved by successfully restructuring debts with bilateral creditors. Now Tajikistan has the lowest level of debt in the Commonwealth of Independent States (CIS).

High rates of growth for the last five years have also significantly reduced poverty in the country, from 81 per cent in 1999 to 64 per cent in 2003. The poorest areas have registered the greatest level of poverty reduction, and inter-regional differences in poverty have decreased, although the difference in poverty levels between the regions remains high—84 per cent in Gorno-Badakhshan Autonomous Province (GBAP) and 45 per cent in the nationally administered regions (NAR).

Notwithstanding the successes achieved and the huge efforts of the country in making institutional and economic reforms, the latter are not keeping pace with the dynamic economic situation, and the decrease in poverty levels is not satisfactory. Because of delays in carrying out fundamental social reforms, the volume and quality of social services remain low, the true rate of unemployment remains high, and the private sector and business do not play a significant role in ensuring employment in the growing population. In the macro-economic sphere, this is due to deficiencies in Government, macroeconomic policy, entrepreneurship, the investment climate, and external economic policy. The present Government system still has many features of the former command system; it is unwieldy and inefficient and there are elements of duplication and excessive administration.

There is no logical and harmonious vertical or horizontal hierarchy for strategic documents, programmes, and plans of economic development and the corresponding institutional structures. Thus, it is difficult to provide precise coordination of priorities, aims, results, division of labour, and responsibility at all levels of the Government or to enable effective interaction of partners in development. A mechanism for joint activity to execute a uniform state policy has not been determined. There is no regular procedure for interaction and information exchange between state bodies; and there is no mechanism of social partnership between the state, civil society, and business. Regional and district controlling authorities rarely participate in the formation of national development policy and are considered mainly to be executors of Government decisions.

The state Government participates excessively in economic activities. Its regulatory functions are not appropriate to the developing market economy. Indirect economic levers of state regulation are being introduced very slowly.

The system of public services faces a lack of quality staff due to unattractive employment conditions. The state bodies lack precise criteria for selection and placement of personnel. There is no system of control over human resources, and nepotism is widespread. In government, civil servants lack motivation, and there exist no effective stimuli for increasing executive discipline and productivity.

The division of functions and powers between central and local levels of Government is not sufficiently defined, leading to poor overall performance of state bodies at the local level. Absence of a clear division of functions in provision of services to the people promotes waste and inefficient use of funds as well as under-financing. Local authorities do not have sufficient powers and opportunities for solving local problems, and, as a result, these problems are solved by the central bodies or not at all.

Local self-government cannot provide the population with effective and high quality services. Activities of the jamoat, the level of management closest to the people, do not meet the principles of local self-government. The jamoat merely obeys the city or regional level of management, and its chairman is appointed by the head of that level of government. In other words, the jamoat is really the local representative of the state government. At the same time, jamoats do not have their own budget or own property; hence, they are directly dependent on the budget of the higher district or city.

The poor potential of the bodies in the economic block to work out economic, monetary, credit, and fiscal forecasts, combined with insufficient cooperation between them at the institutional level, does not allow the Government to improve policy in the field of macroeconomics. The basic mechanisms of distribution of resources, such as the budget, the State Investment Programme (SIP), and the IIIQKB, are still not integrated or incorporated into a uniform process, and the priorities of development and aid programmes are poorly coordinated with the branch and regional programmes and plans. Cooperation between the ministries is ineffective due to lack of a stable, compulsory procedure for preparation of the budget, the SIP, the Poverty Reduction Strategy (PRS), and the IIIQKB and for incorporation of branch and interbranch priorities into the programmes at an early stage in the development of these documents.

Tax (customs), monetary, and credit policy is poorly coordinated with development priorities and is not used as an effective tool to regulate the economy. High bank interest on credit considerably constrains the development of small and medium businesses (SMEs). There is still no securities market to attract available capital for investment.

Not all sectors of the economy contribute to economic growth; the share of agricultural and industrial sectors in GDP has decreased, while the share of others—in particular, services and construction—has increased. The contribution of such important sectors as energy, cotton, and aluminium remains below its potential. Development of the private sector also lags behind.

Agriculture could become an important engine of economic growth and help decrease the level of poverty; however, rates of growth in this sector have decreased owing to low efficiency in the cotton sector. Growth of the cotton sector is restrained by delays in land reform, ongoing governmental regulation of production plans, and difficulties in obtaining financial resources. Cotton-growing farms have a large and growing debt, which by the beginning of 2006 was US\$228 million.

Indicators of the entrepreneurial climate in Tajikistan lag behind other countries with transitional economies. The share of the private sector is only 43 per cent of the GDP, the lowest in post-Soviet countries. Per 1,000 persons there is only one small business enterprise, whereas in Russia there are six, and in the countries of the European Union, not less than 30. Commercial activity prevails (up to 60 per cent), since it does not require significant investments.

According to the Strategy of Privatisation (2003), privatisation of SMEs, on the whole, was completed; however, on average, only 69.8 per cent of privatised enterprises function (in Dushanbe, 93.8 per cent; Khatlon province, 49.2 per cent; Sughd province, 76.1 per cent; GBAP, 49.4 per cent; nationally administered regions [NAR], 71.4 per cent). This shows the lack of efficiency of the privatisation process, which has resulted in a loss of technical potential.

Only 20 to 30 per cent of the industrial potential of manufacturing enterprises is used, on average; because of lack of jobs, up to 20 per cent of able-bodied men are involved in labour migration. The number of small

and micro enterprises (employing up to 10 persons) is falling because of weak tax regulation and a high administrative burden, resulting in reduced state budget revenues and increased growth of the informal economy.

SMEs in Tajikistan face serious administrative barriers constraining their efficiency and profitability. The forms that SMEs can take and ways they should be regulated are not clearly set out in legislation. A number of factors slow down development of the private sector: complex and expensive procedures for state registration and for operating and liquidating businesses, excessive governmental regulations, unreasonable requirements for licensing business activities, lack of financing, restrictions on foreign trade, and excessive inspections of private businesses.

Furthermore, control procedures are not transparent and are too burdensome for business. There has even been an increase in the number of inspections (on average, seven inspections a year) and informal payments (97 to 98 per cent of businesspeople make informal payments). These control procedures do not provide effective protection of the rights of businesspeople. In order to function, businesses face high costs, which arise as a result of contradictions in normative legal documents, the absence of necessary laws, the unsatisfactory execution of laws, and widespread intervention of the central and local authorities in economic activities and the decision-making process. Problems related to protection of property rights, execution of contracts, and corporate management are not adequately dealt with. Existing regulations for sale and purchase of land are inadequate.

Entrepreneurial activity is limited because of weak physical infrastructure (power supply, transport) and business infrastructure (loan and insurance systems). Amortisation policy is not used.

The state support of business is not systematic and does not take into account budgetary losses from tax incentives and other privileges. Support of such economic sectors as light industry and food processing is not sufficient. Business statistics are incomplete, and research in this area is carried out irregularly; the infrastructure of SME support is poorly developed, and enterprise and investment risks remain very significant.

Complex and expensive procedures for checking the quality of imports against accepted standards are a significant barrier to businesspeople, and the list of obligatory certifications is long. As well, the international standards and certificates of the OSCP countries and regional partners are not valid in Tajikistan.

Difficult procedures for crossing borders create significant obstacles for importers and exporters in Tajikistan. Customs registration in Tajikistan can take 3 to 28 days (instead of a more typical 2 days); customs procedures are less effective than in other countries of Central Asia. Registration of exports requires more than 40 administrative procedures, and registration of imports requires 60 days. Due to these requirements, the import and export processes have become very complex, expensive, and corrupt. The customs service has not been modernised, and due to low wages there is no stimulus for increasing its efficiency, discipline, and productivity. Nor have boundary and customs checkpoints been modernised. The checkpoints lack power supply and good access roads. Basic checkpoints in mobile trailers have still not been replaced with adequate structures, and they lack computers. Basic checkpoints operate only 10 hours a day instead of 24 hours.

The bad business climate also affects the volume of direct foreign investment (DFI) in the country: the level of DFI is barely 2 per cent of GDP, much lower than the average across the CIS (3 per cent). The complexity of visa requirements, along with the poor quality of railway and air services, further serve to dampen the business climate in the country.

Absence of regional cooperation, in trade and transit in particular, also decreases access to foreign markets. The inefficient transportation system, complex procedures of trade, obstacles at frontiers, difficulties with labour mobility, and the absence of a uniform customs system and power supply system with neighbouring countries all create additional impediments for manufacturers and businesspeople.

Thus, creation of more favourable conditions for business activities and direct foreign investments is a primary factor in being able to maintain continuous economic growth. It is essential to increase both human and physical capital.

In May 2001, Tajikistan applied for membership in the World Trade Organization (WTO). In February 2003, the 'Memorandum on Foreign Trade of the Republic of Tajikistan' was officially submitted to the WTO for further distribution among member countries. At that point, hard work began, in order to prepare the country for entry into the WTO. Membership is very important: it will enable Tajikistan to participate fully and effectively in world trade and global economic relations, with the aim of achieving steady economic growth and strengthening its export potential. Membership of the Republic of Tajikistan in the WTO is now closer to becoming a reality.

The general analysis of the current situation shows that **Tajikistan does not use its physical and human capital effectively; the available institutional and state systems are not adequate for the formation of an effective system of national development and do not meet the demands of the modern market economy.** Policy in the field of government, macroeconomic development, foreign trade activities, and development of business and investments is created and realised for narrow departmental purposes, without sufficient consideration of the priorities of national development.

In particular, in the field of **public administration** this is connected to the following basic problems:

- Poor coordination of state bodies in the development and realisation of strategic plans; poor coordination of priorities, aims, and results of activity; weak division of responsibility at all levels of government and no effective interaction of partners in development.
- Excessive participation of the state in economic activities; regulatory functions which do not help develop market attitudes.
- Absence of a professional and effective public service.
- No division of functions and powers between central and local government and local autonomous bodies.
- No opportunity for local autonomous bodies to provide access to effective and good-quality services for the population.
- Institutional and functional discrepancies between judicial authority, the Office of the Public Prosecutor, and law enforcement bodies in applying democratic principles and meeting the requirements of the market economy.

The basic problems **in the field of macroeconomic development** in Tajikistan are as follows:

- Poor use of basic physical and human capital, resulting in the reduction of the potential of the country; difficulties in estimation of planned actions and in selection of priorities.
- Underdeveloped mechanisms of market regulation of the economy, including instruments of macroeconomic regulation; lack of account of national priorities and actions in the implemented sectoral policy.
- Imperfect fiscal policy regarding both tax administration and management of public finances; lack of correspondence between the macroeconomic and financial planning methods used.

- Imperfect methods of macroeconomic planning, forecasting, and statistics.
- Imperfect monetary and credit policy and an undeveloped banking system.
- Lack of diversification in the economy and undeveloped export potential.

The basic problems in **improving the investment and business climate** are as follows:

- Objective factors limiting the attraction of investments and development of all forms of business in Tajikistan, including the absence of an outlet to the sea; remoteness from advanced global centres; lack of its own accessible oil and gas deposits; natural and geographical fragmentation of the country into regions; low capacity of the home market. Opportunities for the Government to fully solve these problems are limited.
- Imperfection, incompleteness, and complexity of the legislative base, thus limiting the freedom of business and investments; lack of means to enforce contracts; insufficient level of protection of property rights; significant and excessive administrative barriers; lack of account of restrictive conditions of business in tax and customs policy; high level of intervention of state bodies in the private sector; growth of the informal economy.
- Imperfection and incompleteness of privatisation processes; poor management of state enterprises reflected in low labour productivity; loss of technical potential of the country; low-level use of existing capacity; low export levels; technological issues related to processing local raw materials; low productivity of privatised agricultural structures, including lack of motivation for growing cotton; unsolved problems relating to the sale and purchase of land; and weak corporative legislation.
- Weak level (or absence) of systematisation in the support of business and investments by executive and judicial bodies; lack of attention to development of micro and small businesses in Tajikistan; insufficient research and statistics; absence of business support infrastructure.

The major problems in **regional cooperation and integration in the world economy** are as follows:

- Tajikistan's policies in the fields of transport and transit, migration, investment regulation, security, and drug smuggling depend on the policies of the neighbouring countries, and because of inefficient regional cooperation, they have not been solved effectively in accordance with signed agreements.
- There is poor transport infrastructure and an absence of healthy competition in the transport services market; also, insufficient attention is paid to educational and medical services, as well as to development of the export potential of the country, including export of products with a high degree of value added.
- There exists no transparent and effective mechanism of border and customs control for the movement of goods, labour, services, and capital; the procedures for visits of foreign citizens, including visa problems, are complex, and there is a lack of regulation of migratory labour.
- There is low productivity in the areas of regional cooperation and integration of the economy into international economic relations.

5.2 Development priorities

The main priorities are formation of the System of National Development by 2015, which will reflect the logical vertical hierarchy of strategic documents, programmes and plans, and the realisation of these plans to further economic development and increase the well-being of all members of society. It stipulates that there be coordinated, uniform social and economic policy directed at achieving the targets of the National Development Strategy (NDS), with national aims taking priority over institutional targets and regional goals.

The basic priority in improving *the system of government* is creation of an effective System of National Development by integrating the operational and administrative cycles of the development process:

1. Creation of an effective system of national development according to the requirements of the market economy:
 - a. Upgrading of the system of public administration according to the principles of the market economy.
 - b. Creation of a modern professional public service.
2. Development of market regulation mechanisms:
 - a. Increased management efficiency in public finances and upgrading of tax administration.
 - b. Improvement of methods of macroeconomic planning, forecasting, and statistics.
 - c. Improvement of monetary and credit policy and development of the credit sector.
3. Development of administrative and territorial management and formation of high-grade local self-government.
4. Improvement of the legal and law-enforcement systems according to democratic principles.
5. Diversification of the economy and strengthening of export potential.

Priorities for improvement of the investment climate and development of the private sector and business by 2015 are the following:

1. Improvement of legislation related to the investment and entrepreneurial climate.
2. Improvement of regulations affecting the activity of managing proprietors under various types of ownership.
3. Broader assistance to businesses.

Priorities of the NDS on matters of regional cooperation and integration into the world economy are as follows:

1. Further development of regional cooperation.
2. Integration into the system of global partnership with the aim of development.

5.3 Basic direction of actions

The basic actions in the framework of the NDS by the year 2015 for reforming state management, macroeconomics, private sector development, and integration into economic and regional cooperation will be as follows:

5.3.1 Creation of an effective System of National Development in accordance with the requirements of the market economy

Improvement of the system of public administration in accordance with the principles of the market economy. The Government will undertake measures to introduce a uniform approach to ordering the aims and priorities, programmes, and plans of national development; division of powers according to the aims and priorities of national development; and development and realisation of national, branch, and regional plans and programmes, strengthening their potential through monitoring. Special attention will be given to strengthening the role of civil society in approving and executing governmental decisions.

Reorganisation and redistribution of state functions will serve to limit intervention of the public administration and of state bodies in economic activities. Efforts to improve the system of state regulation, control, and supervision will also increase the transparency and responsibility of the state bodies in approving and executing decisions.

Creation of a modern professional public service. Measures will aim to improve the quality of professional training for civil servants in all levels of public administration, improve the wage system of

civil servants, and modernise the human resources control system to increase incentives for eliminating corruption. Measures will be enacted to improve women's access to, and participation in, the decision-making process.

5.3.2 Development of market regulation mechanisms

Increased efficiency in management of public finances and refinement of tax administration (fiscal policy)

- New measures will further simplify the taxation system, improve the granting of preferences and customs privileges in foreign trade, and maintain private sector development. A nation-wide system of tax accounting will be created to improve tax services. It will provide accurate registration and consistent monitoring of taxpayers. In addition, there will be access to an online system for questions about taxation that will allow taxpayers to submit declarations and pay taxes. Custom administration will be modernised, the legal infrastructure will be put in order, customs duties will be optimised and procedures simplified. New information technologies for customs registration and customs control will be introduced. Construction of additional customs offices, first of all at borders, will be stipulated.
- Measures will be introduced to increase efficiency in budgetary spending. To this end, the Government will undertake steps in the medium term to perfect the budgetary process and precisely define roles of all bodies involved in the process. There will be a stage-by-stage introduction of the medium-term budgetary programme (MTBP) and coordination of the budget with the national priorities. Measures to perfect methods of macro forecasting will be undertaken, and the necessary resources provided, within the framework of introduction of the MTBP. The budgetary commission will get support from separate technical subgroups in preparing macroeconomic parameters, for income forecasting and tax collection, and on planning charges. The SIP and IIFKB will coordinate the tasks of the PRS and other programmes.
- To increase efficiency in public-finance expenditure, measures will be undertaken to increase responsibility and transparency, to strengthen potential in the development and performance of the national and local budgets, to introduce an effective mechanism for state purchases, and to refine financial control by the state. Also, measures will be undertaken to reform the system of compensation for civil servants and employees in the budgetary sphere, and to introduce personal financing in education and public health services.

Perfection of macroeconomic planning and forecasting methods and statistics

- Macroeconomic forecasting will be improved by increasing the potential of executive agencies, by using forecasts to develop the state budget and its basic parameters, and by increasing branch and regional forecasting based on modern forecasting models and an improved statistical base. Macroeconomic planning will be advanced based on the country's national priorities, sectoral measures and priorities, and financed from the budget and foreign aid.
- In the field of statistics, the institutional and legislative base will be improved, and the system of national statistics will be improved by modifying corresponding legal documents, by reorganising the current system, and by revising and improving technical coordination among data collecting agencies, including the ministries. In the near future, further measures will improve the system of indices for forecasting the development of sectors of the economy and methods of GDP accounting, and improve the capabilities of economic and statistics institutions, in order to develop experts in modern forecasting methodology.

Perfection of monetary management and development of the credit sector

- Measures will be taken to increase trust in the banking system through encouraging foreign financial institutions to enter the Tajik market, to interest commercial banks to develop financial tools to im-

prove bank services for clients. Actions also will be directed to develop micro finance initiatives, and to decrease interest rates on these loans. Measures to develop cashless transactions (credit cards) will be realised. Technical support of the currency market, an automated system of electronic tenders for foreign currency, and electronic trade in goods, jobs, and services will be introduced.

5.3.3 Development of administrative and territorial management and formation of high-grade local self-government

- Measures will be taken for precise allocation of duties among levels of management and transfer of adequate powers to them as well as property and financial means. Administrative-territorial divisions will be made in accordance with redistribution of functions and consideration of mutual relations between levels of public administration and local self-government.
- With the view of making local authorities and local self-government more efficient, functions and powers will be distributed based on the 'subsidiary' principle, the property of the local self-government will be allocated according to its functions, financial autonomy for local self-government will be encouraged, and the potential of the local self-government for decision-making in domestic matters will be strengthened.

5.3.4 Improvement of legal and law-enforcement systems in accordance with democratic principles

According to the democratic principles and requirements of the market economy, the functions and tasks of the judicial system, the Office of the Public Prosecutor, and law enforcement bodies will be reformed.

5.3.5 Diversification of the economy and strengthening of export potential

- To strengthen export potential, the Government will undertake a number of measures to increase the efficiency of available export manufacturers; in particular, to increase the profitability of the Tajik Aluminium Factory (TAF) and power sector and the appeal of investment projects in this direction. Cotton industry debts will be resolved to ensure steady development of the cotton sector in the future.
- With the aim of diversification, the Government will undertake measures to ensure funding of processing of raw aluminium, of the textile industry, and of the mining industry.

5.3.6 Improvement of legislation related to the investment and entrepreneurial climate

To develop the private sector and attract direct financial investments, the Government will strengthen the regulatory-legal base, including the tax-customs legislation, to make judicial protection of the rights of investors and businesspeople more effective. Measures will also be directed towards improving the legislation regarding investments, property rights, and concessions, with the possibility of forming an investment code establishing legislative and organisational bases for the creation, functioning, and liquidation of corporations and SMEs, the granting of equal rights to domestic and foreign investors, and the creation of a 'one-stop' body for promotion of investments. Legal forms for micro businesses and SMEs will be established that will simplify their taxation and their relations with all authorities and management bodies, thus stimulating legal business and employment.

5.3.7 Improvement of regulations affecting the activity of managing proprietors under various types of ownership

- The Government will implement measures to systematically reduce administrative barriers, including barriers to state services, and physical and private infrastructure. Procedures for certification of imports will be simplified as much as possible; the list of obligatory certification will be shortened; measures to

recognise basic international standards and certificates of the Organisation of Economic Cooperation and Development countries and regional partners will be considered, including unilaterally.

- The process of privatisation will be considerably advanced; a preliminary study of the market of potential investors will be made prior to the beginning of the privatisation process; transparency for the auction process and guaranteeing the conditions of privatisation will be ensured. A programme of post-privatisation support will be introduced, using consulting firms, investment companies, and commercial banks, probably foreign.
- Measures to simplify border crossings for importers and exporters will be undertaken. Procedures for customs and border registration of cargo will be streamlined. Customs buildings and border checkpoints will be modernised. Computers will be introduced, and the main border and customs posts will operate around the clock.
- Measures to open up the air and rail transportation market will be undertaken. Conditions that will attract the optimum number of carriers will be created. This should lower the transport costs of potential foreign investors and labour migrants.

5.3.8 Broader assistance to business

- The aim here is, with the participation of civil society, to create and monitor transparent and effective measures of state support to micro, small, and medium business. These measures will include information and training, development of the market of micro financing services to encourage private entrepreneurs, especially among rural women, and also through the creation of information and service centres, which should include the state and private ombudsman's authorised representative for consideration of complaints. The Government will assist the business community working in Tajikistan to create various business associations. In addition, the creation of an Investment Council under the President will be considered. The Council will include representatives of SMEs, representatives of large businesses and the Government, and a permanent technical staff. The Government will ask NGOs, business associations, and international organisations to develop and help implement necessary measures. These measures will contribute to meaningful dialogue between businesses and the state.

5.3.9 Further development of regional cooperation

- The Government will undertake steps to reduce political and institutional barriers to regional cooperation, which is necessary to expand and deepen trade and investment (for free movement of goods, services, jobs, and capital), transport and communications, ecological stability, and coordinated use of transborder natural resources. In addition, the Government will undertake measures to create systems for effective use of water, energy potential, and oil and gas, as part of the creation of an integrated power system. A general strategy on economic cooperation, including creating a common free-market zone with common customs tariffs, eliminating customs controls inside the country, and adopting a mechanism to regulate economy and trade similar to that of the EU, will be developed.
- Special attention will be given to the effective functioning of institutions in order to implement bilateral and multilateral regional programmes and cooperative projects. Combined measures will be taken to diversify and expand export potential, including services (such as medical, educational) in demand in the regional market.

5.3.10 Integration into the system of global partnership with the aim of development

- The Government intends to unify domestic legislation using the codes and regulations of the multilateral trade system, and to modernise the mechanism of practical application of laws. Steps to encourage full participation of Tajikistan in world economic relations are being considered through intensification of the effort to join the WTO.

- Discriminatory requirements for foreign service providers in the Tajik market will be eliminated by upgrading the regulations dealing with such services.
- Tourism policies will be upgraded to create the necessary infrastructure and increase potential for the development of tourism.

5.4 Expected results

It is anticipated that implementing the measures designed to create conditions for economic growth within the framework of the NDS, taking into consideration external factors, may bring the following results:

- An effective System of National Development based on clear procedures of acceptance and realisation of regulative decisions and corresponding to the hierarchy of responsible state bodies will be created. Significant progress will be achieved in developing the other branches of central and local authorities, and in encouraging civil society in the acceptance and realisation of state decisions.
- Standard macroeconomic policy directed at achieving the aims and priorities of the NDS will be put into place. Improving the quality of statistical data will increase the validity of programmes based on that data. Monetary and credit, budget and tax, and other types of state policy will be directed towards achieving macroeconomic aims. The programmes and plans put into place will be part of a general national policy and fully equipped with the necessary resources.
- Improved legislation and regulation in the field of investments and entrepreneurship will create an opportunity to increase rational domestic employment, increase the individual incomes of labour migrants, and broaden access to local and foreign investors. Citizens will have the choice of working in the country or abroad, protected by the state. The authority dealing with investment policy will be able to provide potential investors with complete data and information on the progress of the most important investment projects.
- Tajikistan's full membership in the system of global partnership will increase opportunities for the local population. Exports will increase, their structure will be upgraded and diversified, and entering and leaving the country will be significantly simplified. When it joins the WTO, Tajikistan will integrate more fully into the global economy.

In general, due to this systematic and pragmatic policy of creating institutional and functional conditions for economic growth and poverty reduction, Tajikistan will then be able to follow an effective macroeconomic model of long-term development.

5.5 Macroeconomic scenario for the country's development

In light of the above mentioned items and measures for long-term prospects, there are **three basic variants** for developing the national economy. These three scenarios were developed taking into consideration various domestic and foreign factors.

The first variant is characterised by development based on realising active or nascent infrastructure projects and increasing existing capacities. Average annual rates of GDP growth by this variant will decline from 10.6 per cent in 2004 to 5 per cent during the predicted period. The real gain in five years will be 27.63 per cent, and in ten years, 62.89 per cent.

This scenario assumes continued reforms in the economy and state management, creation of conditions for fair competition, elimination of high bureaucratic barriers to entrepreneurial activity, protection of property rights, and realisation of priority projects.

The low rates of growth stipulated in this variant are caused by unfavourable external factors, such as low prices for aluminium and cotton; by a significant rise in cost of energy resources; strong

competition in the international textiles market; and difficulties in attracting investments and constructing hydroelectric power stations and export power lines. In addition, it is estimated that the planned reforms will have a bigger impact in their early stages. Reforms in key sectors such as agriculture, including the resolution of cotton debts, will be slow.

The results of this variant will be moderate because the GDP calculated per person in 2010 will be US\$421.10, and US\$533.70 in 2015, compared to US\$337 in 2005.

Given that the Government is determined to carry out deeper reforms, and considering the new climate both at home and abroad and the fact that the Tajik people are eager for active change, reform of the national economy will be irreversible. So this NDS forecast may be considered the 'variant of underestimated potential'.

The second variant provides for an increase in rates of economic growth up to 7 per cent. The real gain for the five-year term will be 40.3 per cent, and for 10 years, 96.7 per cent. This scenario takes into account not only the successful realisation of active projects, but also planned construction in the power sector, such as the Rogun and Sangtudin hydroelectric power stations GES-1 and -2 and high-voltage power transmission lines, as well as growth in the nonferrous metallurgy sector, including modernisation of the TAF and construction of new aluminium and cement factories in Khatlon province.

This scenario also depends on such key factors as improvement of DFI, more active development of in the business and commercial sectors, and more effective foreign trade.

The reforms implemented by the Government in public administration, in creating conditions for the private sector development, and in protecting property rights will all contribute to the success of this scenario. In addition, reforms in the judicial system will correspond to requirements of the market economy, agriculture will continue to grow, and cotton debts will be successfully resolved.

However, as with the first variant, external factors, such as the prices for cotton and aluminium, will not always remain favourable for Tajikistan. According to this variant, GDP per head by 2010 will be US\$472.60 and US\$806.20 in 2015, compared to US\$337 in 2005.

The third variant, like the second variant, provides for accelerated growth based on improved market conditions and social factors, and on the strengthening of the investment component of development. It is presumed that the reforms listed in the second variant will also be successful under the third variant. This variant supposes an increase GDP growth rate of not less than 9 per cent annually, increasing the real size of GDP in 10 years more than 2.3 times and increasing the share of fixed capital domestic investments in GDP to 11–12 per cent compared to 8.6 per cent in 2005.

The main factors influencing such high growth will be the full-scale construction and commissioning of additional major projects in the power sector (in particular, the Dashtidjum hydroelectric power station on a parity basis with Afghanistan) and in industry and transport. Water, power, and other consortiums will be formed. Most of the cotton and aluminium will be processed in the country, and raw materials will not exceed 50 per cent of exports. In the foreign market, this variant assumes high prices for cotton and aluminium, combined with the settlement of cotton debts and a reduction of trade barriers in the region.

Large-scale regional cooperation in trade and transit matters will be a great help in overcoming the geographical isolation of Tajikistan and will encourage economic diversification.

The real gain in GDP during the first five-year period will be 53.9 per cent; during the second, 50.4 per cent; and for the entire 10 years, GDP will grow 2.3 times. Per capita in 2010 this translates as US\$565; in 2015, US\$948.10. Thus, in five years, GDP will grow 1.7 times.

All these forecast variants of the social and economic development of Tajikistan assume an increase in the quality of economic growth, defined mostly by the growth of the domestic market.

The average annual rate of growth of production for the period 2007–2015 is forecast at 9 per cent, in agriculture 6–7 per cent, in fixed capital investments not less than 10 per cent, in retail turnover 10–11 per cent, and in paid services 9–10 per cent.

It is assumed that economic development will occur in a climate of financial stability. Rates of inflation will be reduced from 7.1 per cent in 2005 to 3 per cent by 2015.

Increasing the well-being of the population, decreasing the level of poverty, and maintaining steady economic growth require economic and financial decentralisation. Key levers to influence efficiency of the proposed measures are frequently found in regional and local levels of management, and these measures are to be realised within the framework of the NDS for the period to 2015.

6. Ensuring Economic Growth (Production Block)

Growth of the production sectors of Tajikistan's economy—comprising industrial production, agriculture, energy, and infrastructure—will create a material base for the stable economic growth of the country, and thus alleviate poverty. Development of this sector will also provide for better domestic employment rates, greater export diversification, broader access to public services, and social security. These results should allow Tajikistan to meet its Millennium Development Goals (MDGs).

6.1 Current situation and basic problems

Many factors affect economic growth in Tajikistan. Activities that would ensure economic growth have been affected by systemic economic crisis and civil war. The country is landlocked, creating difficulties in accessing international markets. The poor economic situation is further exacerbated by the tiny domestic market, lack of modern management expertise, disruption of old economic ties, price inflation, structural problems in different industry sectors, delays in implementation of institutional reforms, inefficiency in reform implementation, and depletion of equipment, natural, and human resources. Lack of a good legal framework hampers the growth of small and medium businesses (SMEs). Industrial development policies are weak. Privatisation efforts in the country are incomplete or inadequate. The quality of public services (such as transportation and utilities) is declining and there is limited access to private services (such as lending, insurance, leasing, and the stock market). The tax burden in the country is among the highest in the region. Labour productivity is low, even when low wages are taken into account.

The pace of economic reforms must increase if the economy is to adjust to increasing energy costs and the accompanying high demand for energy in domestic industrial production. Lack of reforms in this area will most likely lead to negative growth levels. For, as well as limiting economic growth, the above factors also sometimes lead to delays in development or even to dismantling of existing production facilities. Tobacco and silk production have dramatically reduced, and refrigerators, industrial steel, and some other goods have stopped being produced altogether.

Industrial production facilities are grossly underutilised, except where foreign investors have taken an economic interest (for example, in aluminium production, electricity generation, and cotton and basic textile production). Lack of modern production expertise, combined with lack of adequate managerial and production

resources, has forced the remaining producers to switch to low-tech production with a low value-added component in the production cycle. This fact lowers profit margins and eliminates the competitive advantage of the domestic economy, exposing it to external vulnerabilities.

The country's mountainous geography breaks up the energy market into small regional markets, thus reducing economies of scale. Poor infrastructure increases these inefficiencies.

Hydroelectricity production, infrastructure, and irrigation development are considered of great importance in the development of Tajikistan's economy. Electricity generation is vital for the country's main industries, aluminium production and cotton growing. (The Tajik Aluminium Production Factory [TAF], consumes 40 per cent of the country's generation capacity, and cotton irrigation consumes 15 per cent.)

Recently, reductions in gas supplies and decreases in coal production have meant an increase in electricity consumption. Electricity, generated seasonally in Tajikistan, is available for only six to eight hours per day during the low season. Fluctuating availability of electricity leads to fluctuating seasonal production in energy-dependent industries. Limited electricity supplies also disrupt provision of such social services as schools and medical institutions. The disruption is even worse in rural areas. Frequent stoppages of drinking water pumps due to lack of electricity leads to the spread of more infectious diseases.

Industrial production in the country has severely declined since the demise of the Soviet Union. Notwithstanding high growth rates in recent years, 2004 production levels were just 63.6 per cent of 1991 levels. Capacity underutilisation is rampant in the economy. Facilities for only 7.2 per cent of milk processing, 1.6 per cent of animal fat production, 6.3 per cent of refrigerator production, and 0.8 per cent of shoe production are currently put to use. Textile production has declined by 8.9 times compared to 1991 levels, hosiery production declined by 8.6 times, shoe production by 17.2 times, carpet production by 15.2 times, and furniture by hundreds of times if compared to the same period.

Production of the TAF accounts for 40 per cent of industry output of the country. The factory operation is heavily dependent on electricity prices and its production is also affected by transportation costs for raw materials and finished goods, as well as by the quality of the management. Other producers are negatively affected by low quality of their output, high inventory levels, limited demand in the domestic market, and lack of capital investments to sustain diversification. Low productivity levels of the domestic workforce (only 45 per cent of Chinese levels, lower than in Poland and India) increase production costs.

Although the majority (61.5 per cent) of Soviet-era enterprises have been transformed into Western-style shareholder concerns, only 63 per cent of them are on the list of operating enterprises. Imports satisfy 60 per cent of domestic demand. At the same time, money transfers from Tajik workers abroad have contributed to increased availability of some goods.

Joint ventures or new enterprises could be set up at most existing enterprises. There are plans to build new hydroelectricity power plants in the country. This will lead to an increased domestic demand for construction materials, and provide enough energy for heavy energy-consuming production cycles. A government policy to introduce refining of domestically produced raw materials, and to increase the share of value-added goods (important for agricultural produce, especially for cotton) might create new enterprises, enhance the country's export potential, and create jobs for certain disadvantaged social groups (employment for women is a priority). However, fierce international competition for these categories of goods will limit the attractiveness of such a development policy, as will low labour productivity levels in the country.

Tajikistan's natural resources include precious stones, precious metals, concentrates, and salt. The mining industry might rebound if properly supported, for example, by investor support and legislation, including proper licensing rules and enhanced IT support. Existing mining enterprises might be reorganised or new enterprises might be created on the basis of existing ones.

Agriculture. Secure access to basic foods is mainly dependent on the effectiveness of the country's agro-industrial complex (AIC). Agriculture contributes 21 per cent of the GDP and is an important source of raw materials for industrial processing. More than 60 per cent of the arable land is irrigated, 20 per cent mechanically. Electricity charges for irrigation purposes remain artificially low and agricultural production remains ineffective.

Most of the population—66 per cent—lives in rural areas. Of the rural population, 77 per cent lives in poverty, forcing many people to travel abroad to earn a living as guest workers. Private rural households own 22 per cent of arable land and produce over 50 per cent of the total agricultural output. Cotton remains one of the main commodities, contributing 11 per cent to GDP and around 20 per cent to foreign currency earnings of the country. After the demise of the Soviet Union, the cotton industry was in disarray with low crop yields, heavy regulatory interference, and large debts. This led to a shift in production of less valuable goods.

The reform of Soviet-style collective farms is nearing its end. New individually and collectively owned farms are starting to appear. However, the efficiency of land reform remains low because producers (especially those involved in cotton) do not exercise full control over production, sales, and land rights in general. Access to land ownership is complicated; ownership of land in private farms remains collectivised, exacerbating ineffective land use.

In addition, most of the rural infrastructure—rural roads, irrigation systems—does not have proper owners and is not properly maintained. Deteriorating infrastructure further hinders agricultural production.

Ineffective cotton processing technologies, long processing times (up to 200 days), and high processing costs (over US\$140 per ton) lower profits of cotton growers and result in additional crop losses.

The country now grows 50 per cent of its wheat needs. However, lack of adequate transportation limits access to markets and thus limits the increase in production of other agricultural goods, such as fruits and vegetables. Low efficiency in other processing plants, including fruit and vegetable processing and packaging, means low production, although there is demand for these products in other countries.

Privatising livestock farming has led to a twofold decrease in cultivation of forage crops. It has also disrupted traditional livestock feeding pastures. This has resulted in decreased breeding levels of 60 calves per 100 cows, and 80 lambs per 100 sheep, and low milk production (2–4 litres a day). Inadequate veterinary support and lack of forage contribute to cattle loss, which amounts to 14 per cent of livestock. Diseases include brucellosis, tuberculosis, foot-and-mouth disease, cowpox, and anthrax.

Nutrition. Low agriculture productivity and widespread poverty have created rampant nutritional deficiencies. Only 25 per cent of the norm for basic nutritional groups is satisfied. Meat consumption is 9.4 times below the norm, egg consumption is 6.6 times below the norm, and milk consumption is 5.1 times below the norm. In some regions (Khatlon province, GBAP, Rasht Valley) people's protein intake is based on vegetable proteins and satisfies only 12 to 15 per cent of the norm whilst carbohydrate consumption (mainly bread) is in excess of 70 per cent of the norm.

Vitamin deficiencies are widespread, with especially noticeable deficiencies of vitamins A, B2, and minerals such as calcium and iron. Iron-dependent haemoglobin deficiency is widespread; it is found in 38 per cent of children aged 6 months to 5 years, and in 41 per cent of women of child-bearing age. Iodine deficiency affects 64 per cent and 57 per cent of those population groups respectively. Vitamin A deficiency is common in 51.8 per cent of children.

In 2004, food took up 71 to 74 per cent of household budgets. Around 350,000 people were chronically malnourished at that time—7.6 per cent children aged 6 months to 5 years suffered from acute malnutrition and 31.4 per cent were chronically malnourished.

Lack of a nutrition monitoring system in Tajikistan means that signs of malnutrition are not noted. Policy development in this area does not calculate the basic food basket, further adding to difficulties in addressing the elimination of malnutrition in a timely fashion.

Utilities. Over 30 per cent of irrigated lands are not fully used. This will be a cause for concern if electricity charges rise, making irrigation even more costly. Water irrigation pumps must also be restored. Three of four available irrigation pumps are out of order, leading to insufficient water supply for irrigation needs. Major investment will be required to turn the existing irrigation infrastructure around, introduce water usage management, and rehabilitate drainage systems. Soil erosion is common on hilly lands. In addition, 16 per cent of all arable land is saline.

Water users do not have full access to water irrigation and drainage systems, even though water usage associations have been set up. Artificially low charges for water delivery through main irrigation channels lowers investment attractiveness.

Selection and breeding research is in government hands. It is marred by inefficiency, lowering productivity levels in agricultural production. Rural social infrastructure support is delegated to farm owners, burdening them with excessive expenditure. Lack of jobs in rural areas forces farm managers to retain excessive workforces.

The electricity generation system consists of three independent subsystems: Sughd Province subsystem; Southern subsystem, including Khatlon Province, Dushanbe city, and the NAR; and the GBAP subsystem. Tajikistan possesses a substantial potential generation capacity of 527 billion kilowatt hours; however, only 6.5 per cent of this potential is in use.

Hydroelectric plants account for 99 per cent of the 16.5 to 17 billion kilowatt hours of annual electricity generation. Nurek Hydroelectric Station is the major electricity generator; however, due to its small water reservoir capacity, generation capacity in the winter is underused. Nurek HS generation costs are low, at US\$0.003 per kWh, justifying low domestic charges for electricity, much lower than the US\$0.02 per kWh charged for electricity exported to Afghanistan.

However, low charges for electricity encourage electricity overuse and energy-inefficient production cycles, and lead to underfunding of infrastructure maintenance. Funding for this maintenance is further reduced by unpaid debts. Water levels in the Vaksh River subside during the winter season, leading to reduced electricity generation at Nurek HS. All of the above factors result in frequent power outages in the country. The charges are expected to rise to US\$0.021 per kWh by 2010 so the aforementioned problems can be tackled and provide for a break-even production generation cycle. However, raising the charges is a politicised issue which will adversely affect the low-income population. If export rates are applied to domestic electricity consumption, Nurek

HS could receive US\$200 million of additional revenue a year. Some of this additional profit could be used to subsidise the low-income population groups to gain their support for the rate increase.

The country's estimated coal reserves stand at 4.5 billion tons. Only 100,000 tons are extracted annually. Coal mining is difficult because of the great depth of coal-beds and hard-to-access locations of potential mines.

The country's two thermal electric stations, Dushanbe TES and Yvansk TES, could be modernised to use coal as fuel. Central heating is accessible to 60 to 70 per cent of the capital's population, and most use imported gas and fuel oil. However, low thermal insulation of the distribution network and rundown equipment increase the costs of heating.

Although the county boasts great potential energy generation capacity, it imports all forms of energy to some extent (US\$100 million worth). Electricity exports are negligible. The main export market is Afghanistan. There is barter trade of electricity with Uzbekistan; electricity is priced at US\$0.02 per KWh.

The potential electricity generation capacity of the country could be used to increase electricity exports and stimulate creation of hydro-electric plants. Exporting to neighbouring countries—Pakistan, Afghanistan, Iran, Kazakhstan, India, and China—would require building electricity transfer grids and signing export contracts with potential clients.

Infrastructure. The infrastructure system mainly consists of the railways, accounting for 80 per cent of foreign trade turnover, 50 per cent of guest worker passenger traffic to Russia, and more than a third of the physical volume of goods transport as a whole; roads, accounting for 95 per cent of domestic goods transportation; airways; and telecommunications.

Railways. Tajik Railways (TR) consists of 34 enterprises serving three branch lines, which connect Tajikistan via Uzbekistan with the rest of the post-Soviet countries: the Southern branch with Yvan terminal, the Central branch with Dushanbe terminal, and the Northern branch with Kodjand terminal.

The domestic railway system is underdeveloped. There is a great need for investment in TR infrastructure modernisation and reform. Recent research suggests a 60 per cent drop in productivity in the period 1995–2002, due to decreasing transportation volumes and a 20 per cent staff increase. The transportation volumes were at 190 transportation units per employee (that is, tons per kilometre and passengers per kilometre), much lower than the 600 units in other Central Asian countries.

International railway service levels are marred by low-quality service due to old railway cars, poor sanitary conditions in the cars, overloading, and infrequent runs. Most of the locomotives and cars need to be replaced, and 142 km (of 950.7 km) of railways are overdue for capital maintenance. Hence, low train speeds of 15 to 20 km/h are commonplace, notwithstanding higher operating costs at those low speeds. Traffic control and communication systems are worn out and need to be replaced. There are no electricity or communication infrastructure links between Kurgan-Tyube and Kulyab stations, and 85 per cent of the TR cargo is transported in cars owned by foreign companies.

Roads. The country's geography necessitates heavy reliance on automotive transportation. This mode of transport is also the biggest oil consumer in the country. The mountainous relief of the country fragments the small domestic market into even smaller components with limited access to high altitude areas during the winter season. Some research also indicates that informal payments at checkpoints increase costs of transportation by 20 per cent.

The country's road network of 30,000 km was built in 1960–1990. There are 16 thousand km of main and secondary roads. All the roads require capital maintenance; however, there is not enough funding to undertake the maintenance. Roads on privatised rural lands are not centrally maintained.

International automotive transportation is plagued by visa issues, complicated border crossing procedures, inappropriate car/truck types, and undeveloped forwarding businesses. These difficulties result in low volumes of international automotive transportation (less than 5 per cent of external cargo traffic). The majority of goods and guest workers are transported via railways, further explaining low cargo volumes. Greater transportation diversification is required, and transit through the Central Asian countries needs further streamlining. However, technical standards required of transit vehicles generate difficulties, as do the informal payments required for transit.

Airlines. The airline industry is dominated by the national carrier, Tojikiston. There are more than 500,000 passengers annually, the majority of whom are Tajik migrant workers in Russia. The company has 17 international agreements with foreign carriers.

The company deploys a Soviet-built fleet of aircraft, ground support service infrastructure, and flight control equipment. The aircraft fleet consists of 31 planes and helicopters. The average amortisation of TU 154M aircraft is 50 per cent and 90 to 95 per cent for TU 154B aircraft. High aircraft maintenance costs and relatively light aircraft usage justify procurement of Western-made aircraft. There are agreements with the European Bank of Reconstruction and Development and some foreign investors to explore this possibility further. The company is overstaffed; at least 50 per cent of the workers are redundant. In addition, the ticketing system needs to be streamlined.

The company charges higher rates for its services compared to other carriers in the region using the same types of aircraft. Domestic service revenues are less than direct expenses. Limited competition and an unsound regulatory framework induce low transparency in the domestic aviation industry, leading to a high level of accumulated debts. A decision was made in 2006 to restructure this enterprise.

Telecommunications. The telecommunications sector has great development potential due to low throughput of existing communication lines, labour intensiveness of existing technologies, and high expectations for telecommunications growth throughout the world.

Most of the telephone network has been modernised. More than 70 per cent of the existing capacity of old analogue telephone stations has been digitalised. Urban ground telephone networks are 80 per cent digitalised. Almost the whole population—98 per cent—has access to national television broadcasting. The postal service is functioning well; however, it is subsidised by the government.

The ‘Telecommunications Transport Network’ project is expected to connect IT networks to remote areas of the country. A fibre-optics network will connect all the regions. Modern IT technologies will make a new array of multimedia services available to consumers. These services will include electronic versions of periodicals, Internet radio and video broadcasting, Internet video-conferencing, and so forth. The Tajik link of the Trans-Asian European telecommunication network is nearing completion. This will connect more than 20 European and Asian countries. Mobile telecommunications are expanding, with nine operators serving 400,000 subscribers. An e-government project concept is being finalised. The national provider, Tojiktelecom, and national broadcaster, Teleradiokom, are to be restructured starting in 2006.

Overall, the IT industry in Tajikistan is underdeveloped compared to some countries, with only a few local IT companies operating. The development potential of Internet-based businesses in the county is limited by high entry barriers due to the capital intensiveness of the industry. IT incubators offer some solution to IT business development.

IT industry development in Tajikistan will require greater human resources and infrastructure investment. Some of the comparative advantages of the country lie in the widespread proficiency in the Russian language of its people, and low labour costs.

In summary, the main problems and challenges for ensuring economic growth in this area are:

- Consequences of the systemic crisis and the civil war in the country; lack of access to international waterways; the tiny domestic consumer market; disruption of Soviet-era economic ties; price inflation.
- Weakly developed government policy measures; lagging institutional reforms and ineffective economic reforms; the great number of internal and external administrative barriers; weak investment attraction strategies and the slow pace of introduction of innovations; declining production and human resources; unfinished or inefficient privatisation activities; inadequate legal framework; worn-out infrastructure (transportation, utilities); high tax burden.
- Lack of modern management expertise; low labour productivity; low production diversification; high capital intensiveness of existing production and a need for large sums to sustain capital investments in new production; inadequate infrastructure development; expected rise in water usage and electricity charges; underdeveloped SME sector.

More specific problems include the following:

- Ineffective management of government-owned enterprises; low capacity utilisation and high inventory levels in government-owned enterprises; weak corporate governance structures which waste the existing production potential; lack of attention to the mining industry.
- Intense competition in the international markets for goods produced by the domestic industries (textiles, food processing, and possibly mining and pharmaceutical industries); seasonality of production cycles owing to seasonal fluctuations in electricity and gas production.
- High transportation and irrigation costs hampering agriculture development; lack of attention to funding issues of transportation and irrigation systems; lack of transparency in legal and procedural norms; limited access to land ownership; low efficiency of seed farming and livestock breeding; high levels of animal diseases and stock loss; farms required to support rural social infrastructure maintenance.
- Serious problems in the cotton-growing industry owing partly to the high level of accumulated debts of the industry and overregulation of production and sales; high levels of state intervention and weak legal protection of the owners; low crop yields and low cotton ginning efficiency.
- High level of rural poverty leading to diminishing consumer access to foodstuffs; widespread mineral and vitamin deficiency in the diet leading to high death rates.
- Low electricity charges, excessive usage and lack of generation capacity, energy-intensive production cycles and excessive energy usage by households, leading to limited electricity availability, especially during the winter season; high costs of central heating; no clear energy supply strategy; lack of electricity in remote areas driven by high petrol prices; the summer excessive generation capacity not utilised.
- Need for big capital investments in building new hydroelectric plants and modernisation of existing generation systems, prospecting and extraction of gas, coal, oil, and other energy sources; high costs of electricity grid building for electricity export; need for export contract negotiations.
- Low efficiency of state-owned transportation enterprises (Tajik Railways and Tojikiston, the national airlines); weak management, lack of transparency, low service quality, lack of a coherent government policy in the industry, barriers to private sector involvement.
- Transit problems through other countries in Central Asia; undeveloped options for the transit of goods through Tajikistan to other countries; limited private sector involvement in this industry sector; low rate of return on infrastructure investments; financial losses in the postal service.

6.2 Development priorities

General priorities

1. Take holistic approach to the development of this sector: industry sector development must take into account national development goals and priorities; competition fostering measures; reduction of administrative barriers; production, diversification, and modernisation; unleashing of the export potential of the country; consumer rights and environmental protection.
2. Increase resource usage efficiency: electricity, land, minerals, existing production facilities and infrastructure; increasing general labour productivity; aiding the development of SMEs.
3. Fast-track major investment projects.

Specific priorities

1. Increase the country's energy generation potential, including generation of additional electricity to cover the present shortage and then to increase exports.
2. Increase agro-industrial production through the development of the private sector in rural areas and then: (a) increase cotton growth efficiency and restructure debts in the cotton industry in the country; (b) develop entrepreneurship in the agriculture sector and enhance the rule of law in land ownership; (c) restore existing irrigation systems and develop new ones.
3. Support private sector development in selected industries through the following measures: (a) develop incentives for processing domestically produced raw materials; (b) enhance the legal framework and simplification of the licensing process in all areas of economic activity, including the mining and telecom sectors; (c) grant wide access to e-government databases.

6.3 Basic direction of actions

The general direction of efforts to reach long-term development goals under the NDS will be the following:

a. Holistic approach to production sector development

- The Government's development measures will include enhancement of the legal framework, which will have a stimulus effect on the production sector, enhance competition, and clearly define ownership, oversight mechanisms, licensing and cross-border trade, and so on. The Government will also enhance corporate governance in the country. Other development measures will include enhancement of industry sector management, better industry sector policy development and intersectoral coordination, enhancement of the human and technical potential of governing bodies, enhancement of the investment attraction potential of governing bodies, greater innovation, and development of monitoring programmes. Privatisation programmes will account for national priorities and long-term industrial sector development policies. Industrial-production sector reform efficiency will be raised to address productivity-increase goals.
- At least once a year a review of administrative barriers to the production sector will be made. The review results will lead to a reduction of unnecessary barriers. A system of incentives will be developed to stimulate production-equipment modernisation, industrial and agriculture sector processing of raw materials, and export-oriented and general product line extensions. The Government will engage in economic cooperation with other countries. International standards of consumer rights and environment protection will be on the Government agenda.

b. Increase in resource use efficiency

- The Government intends to increase the country's labour productivity. Transport and electricity generation rehabilitation efforts will be supported by the Government, including budget allocations for these efforts. These infrastructure components will enhance the accessibility of remote areas of the country. The Government will support the development of micro, small, and medium-sized enterprises to increase the availability of consumer goods and services in the domestic market. These policy measures will be subject to correction by the Government when deemed necessary. Measures will be

applied to stimulate effective electricity consumption and to foster privatisation of state-owned assets and resource saving.

- A correctional increase of electricity, central heating, gas and water use charges will increase the investment appeal of these industrial sectors. A successful programme of encouraging alternative energy sources and energy conservation in vehicle transport will lessen this industry's dependency on imported gasoline and its vulnerability to price fluctuations of oil products. Simultaneously, the tax burden on consumers of the above resources will be eased and funds allocated to subsidise vulnerable population strata.

c. Fast-tracking of the most important investment projects

- The Government will support major investment projects in infrastructure development, energy, and the industrial sector, subject to resource availability. Special selection criteria will be developed to recognise crucial investment projects. Sector oversight and governing bodies will be authorised to support internal and external investments in micro, small, and medium-sized enterprises, including informational support. Emphasis will be on investment projects aimed at restructuring and efficiency enhancement of large enterprises and natural monopolies.
- The Government will stimulate the construction of: (a) Rogun and Sangtudin hydroelectric stations 1 and 2; (b) the South-North electricity transfer grid; and (c) other export-oriented electricity grids, taking into account long-term prospects. Simultaneously, other energy sources (solar and wind energy) will be developed, with the participation of other countries, to provide energy to remote areas of the country.
- At the same time transportation projects will also be developed considering the long-term prospects. The projects will increase quality of internal and international transportation. They include: (a) the Shahrstan and Shar-Shar tunnel; (b) the road from Dushanbe to the Kyrgyz border; (c) the road connecting Dushanbe, Ayniy, Khojand, and the Uzbek border; and (d) the road from Shogun to Zigar, and roads to Afghanistan, Iran, and Pakistan. The Government expects to complete modernisation of Tajik Railways, the aviation business, and the telecommunications sector.

Production sector priorities include the following action points:

a. Increase the energy potential of the country

- Electricity generation potential will be made more efficient through increasing retail electricity use charges to break even with the costs of generation. This will allow the industry to lower the deficit, enhance the investment appeal of the sector and increase government budget revenues. An effective social protection policy will shield vulnerable population groups from the adverse affects of price increases. An intensive dialogue with potential electricity importers will be started. Efforts will be continued to discuss the issue of dividing the waters of the Amudarya River with the countries in the watershed area. The Government will enhance management efficiency and transparency in the energy sector through furthering the restructuring efforts of Barki Tojik enterprise, rearranging the internal structure of this sector through the grouping of the generation enterprises and 110+ kW electricity grids into a separate structure, and the creation of a tariff regulation body. The Government will also consider creating incentives to develop other energy sources (including gas exploration and extraction, and coal mining and delivery networks to provide the population with access to coal energy), and central heating infrastructure rehabilitation. A long-term development programme will be drafted to address the development plans to 2025.

b. Enhance agricultural productivity

(i) Cotton productivity enhancement and debt restructuring

The cotton industry will undergo farm debt restructuring and general reform. The reform measures will include clearer definition of ownership rights, enhancement of management expertise in this sec-

tor, removal of excessive encroachment of local governing bodies into the crop selection process, introduction of transparent lending, and fostering of competition among suppliers to the sector and the ginneries. Export procedures and cotton fibre pricing mechanisms will be rationalised. Specifically, reform of the commodity exchange will be started and universal cotton grading standards introduced.

(ii) Develop entrepreneurship in agriculture and guaranteeing of land tenure rights

- The Government will undertake to perfect the Land Code in order to ensure uniform land ownership rights, including allowing use of land as collateral, or perpetual land inheritance. Land ownership registration and taxation procedures will be made more transparent. A clear distribution of powers will be introduced among different governing bodies (e.g., between hukumats and the State Land Committee). The functional responsibilities of these bodies will be streamlined to provide clear directions and information to farmers on transfer of land ownership and how to secure the rights for setting up a farming business. The Government will support existing farmer rights advocacy groups and will foster the creation of new farmer interest and land usage management groups and public associations. State control over production and market mechanisms will cease. The Government will continue to provide monitoring and analysis to ensure equal access to land and credit across all population groups. Information support will also be available to inform the general population and specific population groups (women first of all) about their land rights, reform progress, and access to resources.
- The practice of local government intervention in agricultural production will be relinquished. Farmers will receive easier access to information, technologies, marketing research, and training. A programme of enhancing the competitiveness of domestic agricultural production will be set up. Land used as collateral will be allowed to facilitate access to bank lending. Export and import procedures are set to be rationalised. The Government will take measures to ensure disease control and adequate sanitary norms.
- The quality of veterinary, selection, and seed-growing services will be enhanced. Private service providers will be encouraged to enter this sector. Industrial producers will be granted additional privileges for producing goods for domestic consumption. Micro and small-sized enterprises that process local agricultural raw materials will be supported, as will agriculture sector leasing and other related service providers. Flour fortification and salt iodisation standards will be reinforced. Child malnutrition will be reduced.

(iii) Irrigation system restoration and development

- The Government will find ways to finance irrigation systems and other neglected social and transport infrastructures, which should lower the financial burden on agriculture enterprises. The Government will support the creation of variety of associations (for example, of water users and equipment maintenance).

c. Special support to the private sector and investments in selected economic areas

- General direction of efforts will involve creation of conditions for rehabilitation and development of existing large-scale production facilities or creation of new joint production facilities and integrated energy-production enterprises. To achieve this goal the Government will implement measures to increase DFI inflow into processing of domestic raw materials (cotton, hide, wool, aluminium, precious stones, and metals).
- The potential of TAF will be enhanced though the proposed measures for increasing transparency and management expertise at the factory according to the existing action plan. Outstanding payment issues of aluminium transit through neighbouring countries will be resolved. This will allow lower aluminium transportation costs. To address the needs for export diversification the Government will encourage capital investments in processing of aluminium raw materials.

- The Government will encourage the development of the textile industry. Specifically, in addition to other measures for the cotton industry, cotton prices will be liberalised for domestic consumption and hedging instruments will be developed. Tax policy will be reviewed for the textile industry; tariffs will be reviewed for the import of production components for the textile and sewing industries. Also, redundant bureaucratic procedures for export will be scrapped, among others, double certification, many unjustified inspections, and forcing private buyers to buy cotton from a particular seller. The Government will support the creation of a Business Association in the textile industry.
- The Government will try to attract private investments for mining industry development. A sectoral development strategy will be developed where the role of the Government will be clearly defined as a coordinating force in the industry. The private sector of this industry will exercise control over operational decisions on exploration and extraction. Given the high geological potential of the country, the Government will assume pragmatic policy development methods to develop a sector-based strategy aimed at attracting investors into the sector. In particular, the legal framework will be changed and a mining code will be developed. A cadastral system is expected to be created to define the possibilities of exploration work on certain territories. A unified geological database will be created to provide accurate geological information on geological resource deposits for potential investors.

6.4 Expected results

It is expected that realising the measures for development of the production sector within the framework of National Development Strategy will permit the following results:

In the industrial sector:

- Increased job creation through more processing of cotton (50 per cent of produced cotton), tobacco, leather, medicinal herb harvesting, and other agricultural produce. Consumption of 10 per cent of raw aluminium, precious stones, and metals by the domestic production industries. Rehabilitation of construction materials production industry.
- Creation of 8 to 10 industrial-production and industrial-energy complexes at the regional level. Dramatic increase of the number of micro and small enterprises to cater to the needs of the domestic market, and introduction of innovation.

In the agriculture sector:

- Attainment of a high growth rate of agricultural production, strengthened financial condition of the enterprises, completion of the privatisation process of farms, restructured cotton industry debts, increased land use rights and ownership protection, increased market access, lower administrative barriers, increased investment appeal of agricultural production and technology modernisation, all of which will allow the halving of rural poverty. An agreement will be reached on forming regional food processing complexes.
- The agricultural sectors with the best development conditions will be further developed. It is expected that cotton-producing enterprises will voluntarily be merged, which will mean higher crop yields, productivity increases, and the rise of profitability of the industry. Cultivation of other crops that are in demand domestically and abroad will be re-established (geraniums, tobacco, citrus fruit, year-round production of organic vegetables and fruits). The livestock industry will also be developed, including milk production, meat production, and wool production (including goat and yak breeding). Overall, the country is able to fully provide for its food needs, which could eliminate irrational imports.

In the energy sector:

- Lowering of electricity losses before the new hydroelectric plants are built, to streamline electricity generation and consumption through tariff increases and power conservation; introduction of small and

micro hydroelectric plants; exploration of domestic gas reserves and increase of gas use in motor vehicles; and increased use of alternative energy sources (including by the population).

- Technical condition of the production facilities will be enhanced, which will lead to increased electricity generation to 20.5–21.0 billion Kwh annually by 2009, including diminishing technological and commercial losses, modernisation of the existing hydroelectric plants, introduction of additional generation aggregates in Sangtudinsk hydroelectric plant 1 and 2. The first line of the Rongunsk hydroelectric plant and complete use of Sangtudinsk hydroelectric plants 1 and 2 is expected to increase electricity generation to 35 billion Kwh.
- As progress is made in building new generation capacities by 2015 and through completing construction of the Shurobskaya hydroelectric plant on the Vaksh River, the Dashtijumskaya hydroelectric plant on the Pyanj River and utilisation of the Zarafshan River's generation capacity can increase Tajikistan's generation capacity to 57-60 Kwh by 2020. Coal reserves will allow the creation of new chemical production, which will help satisfy regional needs. An agreement will be reached and measures taken to create regional water-energy and industrial-energy complexes.
- According to estimates, electricity export potential of the country may reach 2–2.5 billion Kwh during the summer of 2009; by 2015, 12 billion Kwh per annum; and by 2020, 30–32 billion Kwh per annum.

In the transport and telecommunications sectors the following results will be achieved:

- Improved domestic and foreign cargo and passenger transportation services due to lower administrative barriers; an improved material and technical base, including railways and motorways; increased access to air services and better telecommunications and transit services; cost-cutting in service provision and increased security in the functioning of the transportation system.
- Reconstruction of Tojikiston airlines, Tajik Railways, Tojiktelecom, and Teleradiokom will be completed. Effective use of their material base will be enhanced and management modernised.
- Access to the telecommunications sector services will be increased, and an e-government system developed to ensure better quality governing and population information support. Greater access to the Internet and mobile networks will be made available.

6.5 Financial outlays

The estimated need for financial resources to implement and achieve the above measures within the NDS framework is based on the data on the sectors of industrial production.

The main volume of financing is expected from DFI and internal financial resources, as well as government loans (for certain energy enterprises and infrastructure). External assistance in the form of technical assistance and grants is allocated mainly to institutional development, and direct assistance to low income and vulnerable population groups (food for schoolchildren, flour fortification, etc.).

6.5.1 Estimated financing needs by sector

a. Industrial sector

- Preliminary estimates of investment projects for industrial development of the republic to 2015 is US\$4 billion dollars, 5 per cent for policy measure development in the industrial sector, and 95 per cent DFI (without accounting for tax privileges).
- As of 1 October 2005, domestic and foreign investments worth US\$1 billion have been earmarked, which will be directed at non-ferrous metal industry development (\$700 million) and textiles (\$314 million).

b. Food security and the agro-industrial sector

- According to Ministry of Agriculture calculations, spending in this area to 2015 will be US\$7.680 billion, including the following: farmers' own funds, US\$4.822 billion; budget funds, US\$44 million; foreign investments of US\$2443 million and other investments of US\$413 million.

c. Energy sector

- Overall need for financial resources in the energy sector to 2015 is estimated at US\$7.950 billion.
- As of 1 October 2005, FDI-based project startups are estimated to be valued at \$1.150 billion including: (1) concession of the GBAP electric grid—US\$26.5 million; (2) construction of the first line of Rogunsk hydroelectric station—US\$560 million; (3) construction of Sangtudinsk hydroelectric station 1—US\$250 million; (4) construction of Sangtudinsk hydroelectric station 2—US\$180 million; (5) project 'Rehabilitation of energy sector'—US\$62.4 million (phase 1) and US\$20 million (phase 2); (6) project 'Construction of small hydroelectric stations in rural areas'—US\$13 million; (8) construction of LEP-765 Kv 'Rogun-Horog-Bahangski corridor—Peshavar' (earmarked to begin with the signature of memorandum between the governments of the Republic of Tajikistan and Islamic Republic of Pakistan); (9) the project 'Reducing energy losses in electricity energy and gas sectors of the economy' (earmarked with the agreement with the WB—US\$30 million).
- In order to achieve priorities in the energy sector to 2015, there is a need to attract international investments of US\$6.8 billion.

d. Infrastructure

- Total sum of infrastructure measures is estimated to be US\$1.28922 billion, including US\$1.0459 billion foreign investments (81 per cent), and US\$204.52 million (15.9 per cent) of budget financing.
- From the total sum of financial needs for automotive transport and road infrastructure the sum of US\$411.22 million is allocated; US\$495.6 million is allocated to railways, US\$324.1 million allocated to civil aviation, and US\$58.3 million is allocated to the telecommunications sector.

7. Social Block

The transitional period, with its serious political and economic problems, resulted in sharp deterioration in the state of the social sectors (health care, education and science, social protection of the population, water supply, hygiene and housing services, environment, and gender issues), and resulted in a reduced access by the population to high-quality social services and a deterioration in living standards.

This is explained primarily by the lack of significant reforms, insufficient funding, and deterioration in manpower potential and logistics in the social sector. The limited budget funding of this sector is due to the fact that currently the GNP is only 56 per cent of what it was in 1991, and budget revenues fell from 50 per cent of GNP in 1991 to 18 per cent in 2005. At the same time, foreign subsidies were cut off (they had been about 40 per cent of all budget outlays) and state needs increased.

To this day basic laws on minimum state social standards, which should include many services funded by the state budget, and on a minimum income standard, with inflation-adjusted social guarantees, have not been adopted.

There are also problems in the distribution of powers of state bodies responsible for development, implementation of policies, and adjustment of activities within branches of the social sector and strengthening of their manpower potential. To enhance objectivity, bodies monitoring the quality of services delivered should be independent of branch ministries and agencies.

Despite some changes in the situation within recent years, social payments by the state in 2006 exceed 50 per cent of the state budget, and a great number of new laws and programmes have been adopted; however, there is no significant progress in this sphere or in access to social services, because of the lack of priorities and non-targeted use of funds allocated. Moreover, due to the demographic factor, unmet needs in social services are increasing, which severely affects the economic development of Tajikistan.

Complicated regulations and high administrative barriers impede the development of the private sector, which could deliver some services in the social sphere and enhance capacities of the state to provide basic social services.

Significant foreign assistance targeted at restoring the social potential aims to solve current emergency problems, but as there is no clear choice of long-term priorities, it is not always used in a reasonable way.

7.1 Education

7.1.1 Current situation and basic problems

Tajikistan has entered a transitional period with a relatively high educational potential of human resources and a developed structure of educational institutions inherited from the former Soviet system, which ensured the involvement of children and gender equality in the secondary education system. Educational system financing was at a relatively high level through direct and indirect grants allocated from the state budget. At all levels, education was free and secondary education was obligatory.

During the transitional period, the country faced the problem of preserving and further developing achievements in the field of education while factoring in the new political and socio-economic conditions, the strengthening of state independence, the revival of national history and culture, and the traditions and mores of the ancient Tajik people, while also considering global development and universal values. Dealing with all these concerns was seriously complicated by the consequences of the destructive civil war.

In the 2004–2005 school year Tajikistan had 492 preschool institutions attended by 61,900 children, 3775 comprehensive schools (with about 1.7 million children), including 53 private establishments (18,900 children), 128 primary and secondary vocational institutions (about 54,000 children), and 35 higher educational establishments (118,400 students). School-age children represent about 40 per cent of the population of the country. Rural schools represent 85 per cent of all schools and 72 per cent of schoolchildren.

The Government of the country approved a plan for educational reform for 2004 to 2009, on the basis of which changes in the management and funding structures of schools in five cities and districts have been carried out since January 2005, and the experimental introduction of per capita funding has been undertaken. In 2005 the ‘National development strategy of education for 2006 to 2015’ was developed, which aims to fulfil the purposes and tasks of the MDGs and the programme ‘Education for All’ (EFA). The aims of the MDGs and EFA cannot be achieved without fundamental reform that takes into account the problems of the education system.

The education system depends on informal payments and international assistance because state funding has sharply decreased. The amount of state outlays for education in 1991 was 8.9 per cent of GNP, or 23.6 per cent of overall state expenditures; in 2004 these rates were 3.2 per cent and 17.1 per cent respectively. The actual level of financing met only 30 per cent of needs.

The calculations show that to meet minimal needs to maintain and develop the education system in view of the demographic factor, the level of the annual share of outlays for education in GNP must increase to 6–7 per cent.

A high population growth increases the demand for educational services. The average annual rate of population growth exceeds 2 per cent. According to experts, during the period from 2003 to 2015 the number of pupils in secondary education will rise by 40 per cent, that is, from 1.8 million to 2.3 million. With such high rates of growth, the educational system cannot meet the needs of all children in secondary education.

There is a severe shortage of spaces for pupils, and the condition of buildings is unsatisfactory. Pupils in 80 per cent of schools in the country study in two or three shifts, and in the 2004–2005 school year, the schools needed over 600,000 spaces. According to research, 87 per cent of the schools do not meet adequate hygiene requirements, 26 per cent of schools have no central heating, 24 per cent have no running water, and 35 per cent have no toilets.

The quality of education and the level of knowledge and skills of pupils considerably lag behind present day requirements. So far, serious curricula and programmes meeting the needs of the national economy have not been developed at all levels of the educational system. The absence of up-to-date textbooks, manuals, and methodological materials makes it difficult to conduct classes and follow the curriculum. Only 30 per cent of pupils have a full set of textbooks; 10 per cent have them only for some subjects. There is a shortage of textbooks in the Tajik, Russian, Uzbek, and Turkmen languages.

Higher vocational education does not always take into consideration national priorities in regard to the needs of manpower training, which results in the training of too many specialists in some areas (e.g., teachers) and a shortage of geologists, power engineering specialists, pilots, and so on.

The situation is aggravated by the low qualifications of teachers: 30 per cent of primary school teachers have no special secondary and comprehensive education, and 9.5 per cent of teachers in comprehensive schools have only general secondary education. On top of this, there is a shortage of over 8,000 teachers. One of the reasons for this shortage in teaching staff is low wages; as a consequence, better qualified specialists leave schools. In 2005 the average monthly salary of education workers was 76.4 somonis, or US\$24.40, which is below the average salary in the country.

Labour migration, including teachers, generates a significant outflow of qualified personnel from the education sector; it also aggravates problems because of the absence of fathers, forcing the issue of education of children into the background. Only 30 per cent of migrants made or make various types of investments in education for their children.

The high level of poverty of the population prevents children of poor families from attending school. The level of attendance at comprehensive schools fell to 88 per cent in 2003 compared to 99 per cent in 1991 and continues to fall. In 2003, overall school attendance by boys dropped 6 per cent, and by girls, 18 per cent. The largest drop was among pupils in grades 5 to 11 in cities and nearby settlements, compared to 4 per cent and 7 per cent respectively at rural schools.

Surveys undertaken show that for about 60 per cent of parents expenses incurred in educating their children were beyond their financial capacities; 13.7 per cent of children surveyed did not attend elementary school (grades 1 to 4) and 11.7 per cent did not attend senior grades (5 to 11). High malnutrition, anaemia, and infectious diseases also contribute to non-attendance.

During recent years the gender gap in school attendance, especially among students in grades 9 to 11, has increased. In rural districts the number of girls who stopped attending school was two times higher than that of boys and three times higher in cities.

At present, difficulties in the field of planning and management of education include the absence of a uniform decision-making process, low capability to develop policy and management measures, an inadequate system for evaluating results of training, and poor monitoring of overall performance of educational establishments.

Educational establishments lack up-to-date electronic technologies, computers, and Internet access; their use is also complicated by the shortage of specialists and irregularities in power supply. Up until now, the concept of involving the private sector in education, especially in preschool and higher vocational education, has not been explored.

Existing drawbacks cause ineffective management of physical and human resources, which in turn results in inefficient use of limited financial resources.

A consequence of all these problems is decreasing access and equality, and low attendance.

In summary, the basic problems in education are as follows:

- Management of the education system both at the top and local levels does not meet present requirements and needs in educational services.
- There is insufficient consideration of priorities in funding at various levels of the education system.
- High administrative barriers restrict participation of the private sector in education.
- Professional elementary, secondary, and higher educational establishments in the country as well as abroad train pupils and students in specialities that are not always in demand while at the same time there is a shortage of specialists in other areas.
- The quality of education has dropped because of lack of up-to-date textbooks, teaching manuals, electronic technologies, and Internet access as well as because of a shortage in qualified teaching staff and lack of advanced teacher training.
- Economic difficulties faced by the population, especially in rural areas, limit people's opportunities to use the services of the educational sector.

7.1.2 Development priorities

Accordingly, national goals and priorities and long-term priorities to 2015 in education are the following:

1. Institutional and economic reform of the education system.
2. Raising the potential of the education sector in service delivery.

7.1.3 Basic direction of actions

According to the national development priorities of Tajikistan and the main goals of education development, the following directions are stipulated:

a. Institutional and economic reform of the education system

- The Government plans to establish a minimum guaranteed educational standard and update all relevant legislation accordingly. Independence of educational establishments at all levels will be enhanced.
- To improve management in education, measures will be taken to increase the potential of state bodies at all levels to take responsibility for development, implementation, and regulation of activities in the sector.
- The Government will take measures to give support to educational service delivery by the private sector, including simplification of procedures of licensing, certification, and accreditation of private educational establishments.
- Educational standards, textbook content, and teaching manuals will be updated at all levels to improve the quality of education. Textbooks for children in schools and other educational institutions, including books in ethnic-minority languages, will be developed and published.
- The Government will develop a number of programmes that make use of modern information technologies for the following ends: to manage the quality of education through information and analytical centres; to provide educational establishments with Internet access; to introduce loans for training; to provide computer education; to increase the level of knowledge of pupils in the areas of human rights, hygiene, and a healthy lifestyle; to facilitate upgrading of professional skills of teachers both in the country and abroad; to tailor training to the needs of the economy. There are plans to study the implementation of a gradual transition to a uniform state examination.

- Plans are in the works to develop and adopt a programme for setting up low-cost models of preschool and daycare education as well as a programme for development of rural schools for the period to 2015, with due consideration of regional differences.

b. Raising the potential of education

- Comprehensive measures will be taken to revise the contents of curricula and programmes and methods of advanced training, and improve professional skills in institutes for advanced teacher training; provisions will be made for continuous advanced training of engineering and teaching personnel. A programme will be worked out for vocational training and retraining of the adult population and labour migrants based on regional needs.
- Measures will be taken to create an educational environment favourable to and safe for the health of children, including rehabilitation and repair of schools, restoration of school water supply and heating systems, and construction of separate toilets according to gender and sanitary requirements.
- It is intended to carry out an inventory and monitoring of the state of the infrastructure (buildings, new construction, and municipal systems) and logistics (furniture, sports equipment, and library assets) of all educational establishments in each region. At the same time a set of measures will be adopted on construction of new schools and other educational establishments, their renovation and repair, restoration of water supply and heating systems, construction of toilets according to gender and sanitary requirements, and the furnishing of modern laboratory facilities. Measures will also be taken to update assets and equipment for school laboratories, libraries, regular classrooms and computer classrooms at all educational levels.
- In the regional and large district centres, centres for correspondence training will be set up that will have access to information, educational and methodological resources of university centres.
- To ensure access to elementary, special secondary, and higher vocational training, quotas will be established for orphans and socially vulnerable segments of the population, especially girls, granting them scholarships and bursaries. A mechanism for access to other educational levels on a competitive basis is also planned.
- The Government will direct its efforts to enhance, in accordance with the labour market, work skills of rural youth who graduated from higher educational institutions on the Presidential quota; and social grants to girls from poor families trained in rural high schools will be established. As well, development and realisation of a programme intended to renovate and improve student dormitories is also planned.
- Measures will be planned and developed to send talented students to continue their studies in foreign colleges and universities, and to prepare a model of student loans for gifted students and students from less affluent families.
- A system for incentives and guarantees will be developed for the private and cooperative construction of houses for young teachers and teachers going to work in rural areas.
- Measures to provide pupils of elementary schools with free hot meals and to deliver targeted material aid to buy necessary school items, clothes, and footwear for orphans and the poor will also be developed and implemented. At the same time, work on improving the state programme of social support for orphans, children with disabilities, and children from less affluent families will be undertaken.
- Programmes on gradual integration of children with special needs into conventional preschool educational establishments, will be planned and carried out. Special centres (children's sports facilities, clubs for chess, language studies, disabled children, etc.) will be set up. There are also plans to publish educational and methodological manuals to involve communities and parents in the upbringing and education of children of preschool age.

- To guarantee involvement of children in nursery education, a network of preschool educational establishments will be developed; programmes on improving logistics, attraction of non-budget investments, and development of private, departmental, community, and other preschool educational establishments will be worked out.

7.1.4 Expected results

To provide access to and participation in high-quality education, and to meet the needs of a growing population, implementation of actions planned in the education sector within the NDS framework will enable society to achieve the following preliminary results:

- Additional funds will be funnelled into education; a favourable environment for development of the private sector will be set up, which in its turn will promote the development and support of the budgets of state education institutions by providing high-quality educational services.
- State standards, curricula, and syllabi will be targeted at improving the quality of education and upbringing, and the level of knowledge at all levels of education.
- The level of literacy of the population age 15 to 24 will reach 99.1 per cent while at the same time gender inequality at all stages of education will be partially overcome.
- Financial activity of educational establishments will be decentralised, and a per capita mechanism of funding general secondary education will be accompanied by activities of local communities and parents to resolve problems of education; transparency in education management will be promoted.
- 100 per cent of schoolchildren will be provided with necessary textbooks and manuals, and 20 to 25 per cent of teachers and other education workers will undertake annual retraining and advanced training.
- It is expected that about 99 per cent of all children of school age will be able to receive education, and elementary schools will be fully supplied with free school meals.
- Along with renovation of schools and other educational establishments, about 850 new schools will be constructed throughout the country. All new and renovated schools will be supplied with equipment, heating, and necessary hygiene facilities, and 100 per cent of schools will be provided with clean water.
- The number of children in nursery school education, preschool educational establishments, and school preparatory groups will reach 40 per cent.
- Local computer networks with Internet access, an information system of education management, and other new training technologies at all educational levels will be introduced in educational establishments.

7.1.5 Financial outlays

Financial outlays to accomplish actions in education in the period to 2015 will be in the amount of US\$2.9079 billion, of which state expenditure will be US\$1.9939 billion or 68.57 per cent. US\$218.4 million, or 7.51 per cent of outlays, will be provided by donors; private outlays will be US\$145.5 million and the deficit will be 18.9 per cent. Over the long term, measures will be taken to reduce the gap in financing by attracting additional investments or by increasing the state budget allocation, the search for donors, and contributions from both the public and private sector.

7.2 Science

7.2.1 Current situation and basic problems

The scientific potential of the Republic of Tajikistan is represented by 76 academic, sectoral, scientific research institutes and institutions. There are 29 higher educational institutions with six branches.

Scientific research is conducted in Tajikistan at several venues: the Academy of Sciences, the Tajik Academy of Agricultural Sciences, and the Tajik Academy of Pedagogical Sciences. There are also research institutions and higher educational institutions employing scientific staff, and scientific schools in various branches of natural, medical, agricultural, and social studies.

A number of the regulatory/legal documents determining the national policy in the sphere of science, directed at realising scientific potential and developing scientific research, have been approved.

According to statistics, 9,120 employees worked in scientific research institutes in 2005, including 3,865 people who had a scientific degree, 688 of them doctors of science and 3,177 masters of science. There are 870 students in postgraduate studies, and the number of students studying for a doctoral degree is 20.

In 2005, there were 25 dissertation councils in Tajikistan, including 11 for doctorates and 14 for masters of science. At present, dissertations are being conducted in 41 professions, comprising 22 in natural and engineering science and 19 in public sciences. In 2004, there were 292 dissertations defended (24 doctoral and 268 master's dissertations) and in 2005, 54 (7 and 47 respectively).

Scientific innovations and recommendations are in demand in the national economy. The Institute of Chemistry has developed and introduced a method of using anode ends as metallurgical fuel in pig-iron smelting, instead of the exported coke from the Dushanbe steel fittings factory. This innovation has yielded an economic benefit of US\$200,000, with an annual volume of 3,000 tons of moulding. In addition, a technology of processing mercury-antimony concentrate has been developed and introduced into the technological processes of the Anzob Mineral Enrichment Factory. This has allowed the factory to expand the development of stocks at the Dzhidzhirut deposit. The Institute of Geology, together with the Institute of Aseismic Constructions and Seismology, has created an electronic version of seismic district maps of Tajikistan; geological structural features of the Rogun hydroelectric station site were studied when drawing up the feasibility report on this hydroelectric station.

The Institute of Physiology of Plants and Genetics has created new varieties of medium-size-fibre cotton, and planted them in Khatlon province. More than 20,000 seedlings and micro-tubers of potatoes, free of viral, bacterial, or other diseases, were transferred to facilities of the Ganchinsk, Faizabad, Dzhirgatal, and Muminabad districts.

An information and communications network system designed by the Physics and Technical Institute has good prospects for the networking of biological institutions and other research organisations.

At the same time, there are problems in the science sector that require special attention.

Because of the country's limited financial opportunities, available resources are inefficiently used. Research is conducted in unproductive areas of the natural, technical, medical, and agricultural sciences, and in the humanities and social studies.

The absence of state-sponsored joint scientific and technical programmes means that scientific developments evolve without priorities or practical expediency being taken into account, and are not provided with the necessary support. The scientific potential of the country is not focused on the identified priority problems that must be solved to permit stable development.

The weak coordination of structures in the scientific sector, and the failure to integrate science sufficiently with its potential applications in the economy, slow down research and deprive it of practical value. Scientific and educational structures are functionally isolated, reducing the opportunity to turn out staff who are highly skilled in scientific and technical spheres. Sharing scientific research among institutions of higher education and various scientific disciplines is also thereby reduced.

Many sectors lack highly skilled scientific staff. Shortages take on special significance in the field of pure, natural, technical, biological, mining and geological, and agricultural sciences.

Insufficient financing of science slows down development in this area. Total budgetary financing of science in 2005 was US\$2.7 million, or 0.1 per cent of GNP.

The material basis for carrying out scientific research was partially destroyed during the civil war and the resulting period of instability. Equipment has become outdated and does not meet modern standards.

One of the factors constraining the development of science in the country is a backlog in creating infrastructure based on use of the newest information and communications technologies. That is why the innovations of Tajikistan's scientists are not better known in the international scientific community.

The low level of international scientific and technical cooperation limits use of global knowledge, both in research and in application. Admittedly, already-signed contracts and agreements leave much to be desired.

In summary, the basic problems in science are as follows:

- Limited utilisation of domestic scientific potential in developing state scientific and technical programmes to help solve problems in the country's social and economic development.
- Limited financing, and inefficient use of limited financial assets.
- Insufficient material support of science.
- Delay in the formation of a scientific information base.
- Lack of highly skilled scientific staff.
- Insufficient level of international scientific and technical cooperation.

7.2.2 Development priorities

Within the framework of realisation of the NDS, basic priorities for development of the scientific sector are:

1. Effective utilisation of existing material and scientific potential, with emphasis falling on areas of highest priority.
2. Development of the material and technical basis for the science sector, and for participation in globalization.
3. Deepening of international scientific and technical cooperation.

7.2.3 Basic direction of actions

In accordance with Tajikistan national priorities of development and the primary goals of development of science, the following directions are stipulated:

- a. Effectively utilise existing material and scientific potential
 - In view of inquiries and of the requirements for applying science in the economy, the Government will work for the development of a reform programme in science.
 - An inventory and analysis of the situation, aimed at improving the work of scientific institutions, will be made. Special complex scientific and technical programmes will be created in priority areas of science for development of the economy. Development and specification of priority directions for fundamental research that will have great value for the national economy will be carried out. Once such high-priority scientific and technical areas have been identified and publicised, research funding will be provided on a competitive basis, with a stage-by-stage introduction of a contract system of payment in high-priority scientific and technical areas.

- b. Develop the material and technical basis for science, and for its participation in the globalization process
 - Rehabilitation and modernisation of scientific institutions, astronomical observatories, seismic stations, botanical gardens, and scientific stations working in priority areas will be carried out. In addition, these scientific institutions will be supplied with new equipment and experimental facilities; reactants, chemicals, and other materials; and expeditionary equipment. A scientific information data base will be set up. Research institutions will be connected via the Internet. Centres of Information and Communications Technologies in science will be created.
- c. Deepen international scientific and technical cooperation
 - Development and introduction of a scientific and technical cooperation programme is anticipated, in accordance with the NDS and the globalization process. Measures will be taken to create conditions for active participation by scientists in competitions for the development of projects using state grants and funding from international organisations.

7.2.4 Expected results

Implementing the actions discussed above is expected to achieve the following preliminary results:

- Creation of complex scientific and technical target programmes with economic applications in priority areas of science and for development of the economy.
- Introduction of a competitive system for state and international grants for innovations, development, and recommendations on development of priority sectors of the economy. Use of the scientific potential of the country to stimulate economic growth.
- Creation of information bases, centres of information, and communication technologies in various spheres of science. Connecting of research institutions to the Internet.

7.2.5 Financial outlays

For development of the science sector for the period 2007–2015, it is estimated that US\$135.5 million will be required.

7.3 Health

7.3.1 Current situation and basic problems

Despite an increase in budgetary financing and foreign aid, access to public health-care services is restricted, for three main reasons: (1) specific causes of high infant and maternal mortality, as well as the spread of socially dangerous infections; (2) systemic factors due to slow rates of reforms, limited involvement of the private sector, lack of priorities in utilising funds, and inadequate finance management; and (3) technical reasons beyond the framework of public health care and requiring a comprehensive national approach.

The budgetary funds currently allocated are insufficient to provide (or develop) stable public health care. The health-care system does not have what it needs to perform its key functions successfully. State expenditures for public health have fallen from 4.5 per cent of the GNP in 1991 to 1.3 per cent in 2005, and amount to only \$3.5 per capita.

The health-care system is becoming more and more dependent on informal private payments for medical services, and on foreign aid. Tajikistan faces a shortage of medical workers and a decrease in their level of qualification, especially in the countryside. Ineffective planning, distribution, and management of human resources, as well as weak motivation and low salaries of medical staff, have meant a high outflow of medical

workers. These problems are aggravated by the deterioration of medical institutions, including hospitals, which lack up-to-date medical equipment and tools. The hospital buildings themselves are suffering from neglect.

Despite the availability of its own raw material base, Tajikistan does not have a sufficiently developed pharmaceutical industry, and over 90 per cent of drugs are imported. The shortage in high-quality medicines is also explained by the weak development of the market for legal medical products, especially in the countryside. Drugs are purchased mostly through informal sources, resulting in quality problems.

At present the republic has quite high infant mortality rates. According to preliminary Ministry of Health data for 2005, the infant mortality rate was 17.0 per 1,000 live births, though this does not reflect the real situation. In 2000, it was estimated that the infant mortality rate was actually 89.0 per 1,000 and the mortality rate for children aged to 5 years was 118 per 1,000 live births. During recent years maternal mortality has become a serious problem. According to official data the rate was 40.1 per 100,000 live births in 2005. However, in 2003, it was estimated that the level of maternal mortality in Tajikistan was 120 per 100,000 live births. The reasons for such a high level of maternal mortality are frequent births, low access to emergency obstetric care, and a high percentage of deliveries not assisted by qualified medical personnel.

Fighting infectious diseases remains one of the important challenges for public health in Tajikistan. As of December, 2005, there were 506 HIV cases registered officially, but in fact the real number of HIV carriers is more than 10 times higher than official statistics (6,800 cases). Despite the 80 per cent fall in tropical malaria deaths, the situation there remains grave. According to preliminary data, 2,083 cases of malaria were registered in 2005; however, 80 to 90 per cent of all the cases of malaria are carriers but show no symptoms. The total number of both symptomatic and asymptomatic cases of malaria in the country ranges from 250,000 to 300,000.

Officially, there were 22,145 cases of helminthiasis in Tajikistan in 2005. Nevertheless, this figure does not reflect reality accurately. In view of the limited access to public health-care services, and an insufficient level of control, the real number of the helminthes infections in the republic is probably 40 to 50 times the official number.

During the last 10 years the number of registered deaths due to tuberculosis has increased by 2.5 times and was 7.0 per 100,000 residents in 2005.

Immunisation services face various difficulties, such as a shortage of vaccines and cold chain equipment, which are aggravated by the overall decline in the quality of health services in the country. According to 2003–2005 official statistics, the level of immunisation coverage was 95 to 97 per cent. Due to the lack of a sufficient amount of vaccines, however, re-vaccination of adolescents and adults is not carried out, imposing the threat of a new outbreak of vaccine-controlled infections on the country.

In summary, public health problems can be grouped as follows:

- Low rates of reforms in public health care; weak involvement of the private sector; lack of prioritisation in attracting domestic and foreign funds; inadequate funding of public health care; ineffective use and distribution of limited financial resources.
- Unsatisfactory staffing and physical state of facilities.
- Inadequate quality of pre-natal and post-natal services, and a low level (and inaccessibility) of services in the sphere of reproductive health and maternal care.
- Malnutrition and poor quality of drinking water, resulting in the rise of disease.
- Unsustainable vaccination.

- Low public awareness of and insufficient knowledge to prevent HIV/AIDS, STDs, malaria, tuberculosis, and helminthiasis.

7.3.2 Development priorities

1. Reform the state policy in the field of health funding and management, which includes development of the private sector and attraction of investments.
2. Improve mother and child protection.
3. Arrest the spread of HIV/AIDS, reducing infectious diseases, and eradicating some vaccine-controllable infections.
4. Improve accessibility, quality, and efficiency of health services.

7.3.3 Basic direction of actions

a. Reforming state policy in the field of health-care funding and management

- Implementing and monitoring programmes of public health-care reform as well as a base programme for rendering medical-sanitation assistance are envisaged, which will improve the quality and accessibility of medical care and ensure free medical and sanitation help to the population in conformity with a guaranteed package of medical services.
- Measures will be taken to develop and introduce a law 'On obligatory and voluntary medical insurance' (OMI and VMI). Transition to OMI and VMI will ensure new mechanisms are set up to protect the rights of patients. As well, a system of contractual relations between medical insurance organisations and treatment and preventative care establishments will be established.
- The Government has planned to introduce paid services within the state public health system so prices will be close to their real costs. Actions will be aimed at equalising the competition between health suppliers of state and private health establishments.
- The Government will undertake to achieve equal access and fair distribution of financial resources. Public health resources will be distributed according to geographical and demographic factors and health indicators.
- Funds saved through restructuring the health-care system will be reinvested. This will ensure improvement in the quality of medical assistance and will serve to develop administrative potential in the public health-care system.
- The Government will undertake to enhance the capacity and potential to expand the export of medical services.
- Development of an informational system for health-care management is envisaged, to provide feedback systems for decision-making purposes as well as to monitor the progress of reforms.
- NGOs and international partners will be involved in a dialogue on health policy issues, so that transparency may be established and solutions for public health-care issues may be achieved.
- The Government has planned to provide the population with high quality and inexpensive medical products by developing a local pharmaceutical industry, creating a market for drug supplies, and encouraging investment projects in these areas. The local pharmaceutical industry would comprise enterprises with various types of ownership oriented towards using local raw materials.
- Funding for primary medical hygiene assistance (PMHA) is to be increased, and the payment system for health services suppliers is to be improved. The measure will aim at paying salaries for health workers according to the quality of service provided and results achieved.

- The Government will undertake measures to create conditions to develop a civilised market within the public health sector. Such measures include simplifying the system of licensing medical services and modifying the tax and customs regulations. The Government will also assist the private sector in acquiring premises and equipment.
 - Measures will be taken to develop a system of protection of consumers' rights, which will enable consumers of medical services to receive high-quality medical assistance and also influence relations between medical insurance organisations and medical service providers.
- b. Improvement of mother and child protection
- The Government intends to implement and monitor 'The Strategic Plan on Reproductive Health for the Period to 2014', the programme 'Safe Motherhood' for the period to 2010, and 'The Concepts of State Demographic Policy for 2003 to 2015'. These measures will allow health protection for mother and child to be improved so as to reduce maternal and child mortality rates.
 - The Government plans to provide access to free pre-natal, post-natal, and emergency obstetric care. This access would include developing a system for referring women to medical institutions and using up-to-date technology and qualified medical personnel at each birth.
 - Practising breastfeeding only would improve the status of nutrition for children. To achieve this goal a law 'On Protection of Breastfeeding' will be adopted, and both family and community help will be strengthened to expand this practice.
 - The Government intends to improve the status of nutrition for women by providing them with access to food supplements with micronutrients, as well as taking measures targeted at changing habits such as promoting healthy nutrition practices via public awareness campaigns.
 - The Government envisages expanding its implementation of the WHO/UNICEF strategy on integrated management of childhood diseases.
 - Measures will be taken to meet the needs for contraceptives and improved access to safe abortions for women of reproductive age.
 - To improve family planning practices, there are plans to provide each family planning clinic with three or four types of contraceptive agents. There are also plans to provide appropriate equipment and vehicles, to increase accessibility to reproductive health services.
- c. Checking the spread of HIV/AIDS, reduction of infectious diseases and eradication of some vaccine-controlled infections
- The Government is going to take measures to implement and monitor 'The strategic programme on counteracting the spread of HIV/AIDS for the period of 2004 to 2010', 'The national programme on fighting tuberculosis for the period of 2003 to 2010', 'The programme on immune prophylaxis for 2003 to 2010', 'The national programme on fighting tropical diseases in the Republic of Tajikistan for 2006 to 2010', and 'Programmes on formation of a healthy lifestyle in the population of the Republic of Tajikistan for the period to 2010', which will allow society to check the spread of infectious diseases and eradicate some vaccine-controlled infections.
 - The Government has plans to develop and implement a programme of helminthiasis control so that helminthiasis may be reduced among school-age children.
 - The Government intends to implement active epidemiological supervision of infectious diseases, which will allow them to control epidemiological situations and to take measures to localise infections in a timely fashion.
 - To reduce the occurrence of infectious diseases, widespread campaigns for immunising and maintaining immunisations will be held, to protect the population from vaccine-controlled infections.

- To improve the health of the population it is planned to launch and carry out annual campaigns on raising public awareness of healthy lifestyles.

d. Improving accessibility, quality, and efficiency of medical services

- To improve accessibility and ensure a high quality of medical services, developing a new type of primary medical-sanitation assistance, based on the concept of family medicine, is planned.
- Restructuring health institutions is planned. The first priority will be improving accessibility to medical care as well as rational use of available financial resources.
- Rehabilitating and re-equipping health establishments is planned, for improving the quality and array of medical services delivered.
- Effective work on sanitary and epidemiologic services is planned.

7.3.4 Expected results

Implementing actions planned for public health care within the framework of the NDS will allow the Government to ensure the following:

- Improvement of the normative legal base to include introduction of medical insurance; development and realisation of other laws, programmes, and plans of great importance for public health protection; introduction of a single system of interrelated databases throughout the country.
- Creation of a favourable environment for the development of a private sector, which in turn will increase the quality of medical services delivered to the population and will support the budget of the public health-care system.
- Introduction of state and private funds for medical insurance; payment of suppliers of medical services, including hospital services according to the number of patients treated, and at PMHA clinics according to per capita funding.
- Reduction of maternal and child mortality rates.
- Checking of the spread of HIV/AIDS, reduction of the scale of occurrence of infectious diseases, and eradication of some vaccine-controlled infections.
- Development of a pharmaceutical industry, and the establishment of enterprises with various types of ownership to produce medical products from local raw materials.
- Improvement of accessibility and quality of rehabilitation of medical services, equipment, tools, vehicles, and medical products for treatment and preventative care establishments.

7.3.5 Financial outlays

For achieving the MDGs in public health care by 2015, estimated financial outlays amount to about US\$3.6 billion or, on average, US\$42 per capita, per year.

7.4 Social protection

7.4.1 Current situation and basic problems

The level of the birth rate in the republic remains high, resulting in a constantly growing labour supply. However, there is already a high rate of unemployment in the country. According to official data it is at about 2.1 per cent, while in reality the rate is far higher—by expert estimate, it is about 30 per cent of the economically active population of the republic.

There are three labour markets in the country. Practically equal in size, they include official employment; informal employment including the informal economy; and labour migration, which is difficult to register.

The present stage of development of Tajik society is characterised by the rise in hidden unemployment, significant differentiation in social status, and limited economic opportunities for the major part of the population. Hence, the Government considers poverty reduction and major reform of social protection to be main priorities.

The presence of a large informal sector, which can include unregistered labour migrants outside Tajikistan, has far-reaching and ambiguous consequences both for development of the financial and economic systems of the republic and for social protection of the population. The tax base necessary for development of the state social transfer system is decreasing, but at the same time an informal system of social support of the population has been established and is operating successfully. The system includes the poorest strata of the population, and its financial basis comprises money transferred by labour migrants working outside the republic, incomes from informal employment, and social transfers within families. Active labour migration is a powerful factor constraining the increase of unemployment in the republic.

At present, official income from labour does not play a dominant role in family incomes in the country. About 75 per cent of families use incomes from several sources, the percentage of each source roughly corresponding to that of the relevant segments of the labour market mentioned above.

Weak opportunities for the state to carry out an active policy of population income management has led to disproportions between its financial resources available for paying pensions and allowances, and the size of those payments expected by citizens.

The system of social protection of the population inherited from Soviet times has not undergone appreciable changes since independence. Its framework still has a wide spectrum of allowances and privileges intended for some categories of citizens; however, its obligations do not take into account the state's financial constraints. State budget funds are limited, making it impossible to maintain the existing system, which is complicated, lacks transparency and clear targets, and does not meet modern requirements.

The pension system is flawed and indefensible from an economic standpoint, and public funds do not exist to make it possible to continue it. The actual size of pensions is very low, due to the low level of wages, and the criteria used as the basis for defining categories of citizens who are eligible for pensions are too vague. Due to administrative inefficiencies and a poor application of the law, it is very difficult to collect necessary fees and contributions from private individuals. Social aid (and monetary allowances for children in particular), is low and the programme is insufficiently focused. It is also quite obvious that allowances granted by the Fund for Social Protection of the Population (FSPP) and the ДКБ programme are insufficient.

Though laws stipulate various non-monetary privileges, in practice beneficiaries seldom receive them.

It is necessary to take urgent measures to reform the current system of social protection to ensure that the most vulnerable are protected against any further fall in incomes and deterioration in the standard of living.

In summary, the system of social protection faces the following main problems:

- It does not meet modern requirements and is not effective.
- Programmes of monetary support and payments of pensions require improved administration.
- Monetary support is not targeted at specific groups.
- The level of wages and social payments is unacceptably low.

- The system of support for the chronically ill, the elderly, and children with disabilities (including those taking in-patient treatment) does not meet conventional standards.

The main problems of vocational training in Tajikistan include:

- Insufficient flexibility of the traditional system of primary vocational training, and its isolation from the needs of the labour market (including the external market).
- Lack of congruency between professional training standards and the modern requirements of the labour market (including the external market).
- Outdated educational logistics in educational institutions of primary vocational training.
- The absence of a network of up-to-date educational centres for training and advanced manpower training.
- An imperfect mechanism for funding training and retraining of the unemployed.
- The absence of mechanisms stimulating the private sector in the areas of training and advanced manpower training.

The major problems in the sphere of the labour market and labour migration are:

- The absence of a rational, active policy in the labour market targeted at promoting effective employment, encouraging the growth of the economy, improving living standards, meeting the needs of the labour force, and reducing the level of unemployment.
- The poor quality and lack of competitiveness of the labour potential of the country.
- The absence of support for business initiatives.
- The existence of the informal economy in the sphere of labour relations.
- The need to improve employment-related legislation.
- Inefficiency of institutional mechanisms of migration management.
- The presence of a significant informal economy in the form of labour migration.
- Social and legal vulnerability of labour migrants and their low qualifications.

7.4.2 Development priorities

Existing problems have led to the development of these long-term priorities within the framework of the NDS:

1. Improve effectiveness of social protection of the population.
2. Adjust primary vocational manpower training to the requirements of the labour market.
3. Provide effective employment and implementation of the goals of migration policy.
4. Ensure a leading role for contract relations and improve work conditions and labour protection.

7.4.3 Basic direction of actions

a. Improvement of social protection of the population

- It is planned to adopt a law titled 'On pension insurance'. To encourage complete and prompt payment of insurance fees the law stipulates that fees in the social tax should be divided into social and pension insurance; the rate of social tax should be differentiated between branches and types of activities, and penalties instituted for late payment of the tax, as well as control over the target use of social insurance funds.
- The powers of bodies responsible for developing, implementing and adjusting policy should be clearly set out.

- A uniform, inter-agency, integrated information network should be established, which would include data on employment, migration, social security, the FSPP, and banks.
 - Appropriate working conditions will be set up for social service establishments, including reconstructing buildings and providing necessary equipment and health centres for the disabled.
- b. Adjusting primary vocational manpower training to the requirements of the labour market
- Universal use of module and interactive forms of training with a wide application of visual teaching aids, simulators, and equipment relevant to specialities that are in great demand, including special programmes for training women.
 - Setting up of business schools, business incubators, centres, and other establishments for developing SMEs and support for women entrepreneurs in rural areas.
 - Flexibility of courses both in terms of their content and structure, depending on trainees and the level of their education, trade, and purpose in training, in order to expand opportunities for the vocational training of girls.
 - Implementation of a series of measures targeted at training workers needed in the labour market so that their skill level meets the new requirements of enterprises (updating of standards of vocational training, development of relevant curricula and programmes, and so forth).
 - Major repairs and construction of new buildings in certain districts for technical training colleges, with appropriate educational equipment, visual aids, educational equipment and simulators; teaching and methodological literature to meet market requirements. Training of teachers and in-service training for vocational needs, held at teacher-training and technical colleges.

c. Provision of effective employment and achievement of migration policy goals

The Government intends to implement measures to increase employment, including:

- Promotion of the private sector and business, attraction of investments; development of self-employment and employment of women, as well as development of national crafts; training (including advanced training) of the unemployed in new trades; expansion of the practice of part-time employment; involvement of social partners in solving problems of employment.
- Setting up databanks of vacancies available nationally and locally, and databanks of individuals looking for jobs; expansion of a network of advisory employment services, to speed up the job-search process and provide enterprises with labour requirements.
- Regular estimates of informal employment, to allow preventive measures to be taken and to try to legalise informal labour activities.
- Monitoring of children's involvement in the informal sector of employment, to allow measures to be taken to prevent the worst forms of child labour, and to provide social protection assistance to needy groups.
- Further improvement of the system of state statistical reporting in the field of employment (provision of such gender disaggregated employment indicators as branches of the economy, introduction of gender statistics in such spheres as employment in the informal sector, unpaid work).
- Development and implementation of a programme of temporary employment, envisaging: a wider participation of *hukumats*; establishing enterprises (including private enterprises); financing public works, especially in rural areas, including water supply, housing, and communal services.
- Negotiation and implementation of relevant intergovernmental agreements with countries employing workers from Tajikistan; study of mechanisms of legal support for labour migrants, and conclusion of annual contracts with enterprises that use this labour.
- Creation of a network of centres for vocational training and advanced training of labour migrants.

d. The leading role of contract relations, improvement of working conditions and labour safety

- Creation of a tripartite system of social partners for resolving labour and social protection problems, comprising associations of employers who will become proxy partners of executive authorities and trade unions. Development of partnership relations within the tripartite system will also ensure protection of the interests of the social partners.
- Introduction of advanced international experience concerning protection and working conditions, using forms and methods proposed by the International Labour Organisation.

7.4.4 Expected results

Implementing the planned NDS actions will allow the Government to increase the level of social protection of the most vulnerable. Developing the social service system with the active participation of communities will also promote a deeper social integration of such socially vulnerable citizens as people with disabilities, the elderly, and orphans.

The planned measures will provide social and legal security for labour migrants abroad. They will also reduce the level of unemployment in the republic, especially among young people; train qualified workers according to present requirements of the labour market; and enhance the role of social partners in resolving labour problems and providing social protection.

7.4.5 Financial outlays

Financial outlays to accomplish planned measures for social protection for the period to 2015 are estimated at US\$125 million. Of this, US\$28 million will come from the state budget, US\$12.5 million from private payments, US\$32.5 million from foreign aid, leaving a deficit of US\$52 million (41.6 per cent).

7.5 Water supply, sanitation and housing

7.5.1 Current situation and basic problems

Increasing accessibility to water supply, sanitation, and housing services—vital to the promotion of public health as well as to the state of the environment—is one of the main tasks of the MDGs.

The main water supply sources in Tajikistan are surface and underground waters, half of which are hard and highly mineralised. About 4.01 million people (59 per cent of the population), including 93 per cent of urban dwellers and 47 per cent of rural dwellers, have access to systems of centralised water supply, some of which are non-functioning. Of 699 centralised systems of water supply available nationally, 113 do not function and 358 do not meet sanitary requirements.

Centralised water supply systems, which in most cases deliver water not suitable for drinking, are used by 1.5 million city dwellers (87 per cent of the population). In the countryside centralised drinking water is available for only 20 per cent of the population. The rest use water from various sources—springs, wells with a manual pump, drainage canals, channels, rain, and snow—that have no established sanitation standards. As well, water pipes in the countryside usually operate without regard to technical standards. As a result, people in the countryside suffer from a high rate of water-borne infectious disease.

The situation is grave. Two major barriers for developing the water supply system in rural districts are: (1) the absence of water pipe systems, and (2) irregular and poor quality power supply.

The entire water supply infrastructure is more than 70 per cent worn out and in need of serious restoration and reconstruction. Leakage from water systems (on the average 50 to 60 per cent) not only reduces the actual water supply, but is dangerous from a sanitary point of view, imposing a direct threat to the health of population due to ex-filtration of polluted subsoil waters.

Sewage treatment is available for only 23 per cent of the urban population. Of 62 cities, district centres, and towns and villages, only 52 have a centralised water supply system, and only 28 have a sewage system. In others the system of centralised sewage hardly operates at all, and there is no collection and recycling of solid household wastes. The situation with respect to sewage and sanitation in the countryside is worse yet, since only 5 per cent of residents are provided with these services.

The total area of available housing is 57 million square metres, including private housing (525 million square metres) and state and public housing (5.1 million square metres). The area of old emergency housing was 55,400 square metres. Towns and villages have 23.8 million square metres of housing; in the countryside, there are 33.8 million square metres. Of these, only 56,800 square metres were in good repair in 2005 (0.1 per cent of available housing); overall, only 781,000 somoni (US\$244,000) was spent on major repairs.

For housing, there are 11,622.9 kilometres of water supply systems, 9969.5 kilometres of sewers, 6553.6 kilometres of central heating pipes, 9466.3 kilometres of gas pipes, and 5500.6 kilometres of hot water pipes. There are 3279.5 kilometres of telephone lines in the cities and rural areas.

In the post-Soviet period, the quality of water supply, sanitation, and housing services has deteriorated due to the lack of funding in the budget; routine maintenance work is frequently not done or only partially done. The main reasons for the unsatisfactory condition of these services are difficulties caused by the civil war and the post-Soviet transition to a market economy. Domestic funding for these services is substantially limited due to a low level of budgetary appropriations and difficulties with collection of payments from consumers of municipal services. Housing construction begun during the Soviet regime remains unfinished, and there are problems financing it.

To improve the quality of housing services and enhance motivation for rational use of water both by the population and business enterprises there is a need for structural reforms. Also needed are reconstruction and restoration of water lines, construction of new water pipes, and setting up of alternative water supply systems.

Private business does not participate in delivering housing services, sewage, or water supply systems. The main obstacles for setting up a market of competitive private services in this sphere are: organisational and financial issues involved in the private management of available housing, and imperfect mechanisms to ensure the work of private companies. Participation of private companies in the housing services market is also restrained by administrative barriers and insufficient state support.

To re-emphasise, the current condition in water supply, sanitation, and housing services is critical. Increased funding is needed across the board.

It is impossible to restore and improve the quality of housing services of the population without a proper management system. An effective system of economic motivation for managing organisations must be established, to reduce resource expenses and enhance operational efficiency.

A legal base for adjusting relations in the sphere of maintenance, operation, repair, and restoration of housing and communal services will be laid out in ‘The law on drinking water and water supply’, ‘The state standard on clear water’ and an updated ‘Housing Code of the Republic of Tajikistan’.

Achievement of the main goal of reform to set up a civilised market of housing services and to develop competition in maintenance of housing is impossible without the formation of the main element of the system of reform—namely, a real proprietor of housing. The present conclusion is that citizens and businesses should be involved together in reforming housing and communal services. The main task at this stage is formation of a sense of property in the population, stimulating their interest in managing housing.

Strategic actions aimed at restoring and maintaining normal operations of housing complexes and improving the quality of services delivered to the population are proposed.

In summary, the basic problems in water supply, sanitation, and housing services are the following:

- Contradiction between the legal foundation and modern requirements; lack of a solution to problems concerning the transfer of housing services to local authorities; absence of strategic plans for restoring and developing housing and communal services; absence of a body to carry out a uniform technical policy in the branch.
- Insufficient financing, resulting in a low level of housing and municipal services.
- Unsatisfactory pricing policy.
- Ineffective utilisation of domestic and foreign investments; low collection of fees for services delivered.
- Unsatisfactory technical condition of existing housing and communal services, widespread lack of water, power, heating, and sanitation; the lack of a steady power supply.

- Absence of centralised sewage systems; absence of collection and recycling of solid household wastes in the countryside.
- Lack of qualified staff in the sphere.

7.5.2 Development priorities

- Reform the system as a whole by improving the sector's policy and setting up new organisations of proprietors.
- Create favourable conditions for investments in the sector; attract the private sector.
- Develop local water supply systems in rural settlements.
- Restore and develop housing; improve systems for water, power, and heat supply and sanitation.

7.5.3 Basic direction of actions

- a. Reform the system as a whole by improving the policy in the sector and setting up new organisations of proprietors
 - The Government will undertake measures to improve legislation and adopt as the law of the Republic of Tajikistan 'Associations for Housing Proprietors', 'Clean Water and Water Supply', and 'The State Standard for Clean Water'. Master plans for development of administrative territories will be developed jointly with local authorities to develop the territories and promote private business. Standards and specifications on the quality of services rendered in the housing sector will allow the population normal access to clean water, sewage systems, sanitation, and housing.
 - The Government will establish necessary conditions for the development, implementation, and strengthening of mechanisms to ensure that consumers pay the production cost of utilities. Measures will be taken both to increase service charges and to provide assistance for the poor.
 - Associations of water users will receive comprehensive support, and the activities they develop will be promoted.
- b. Creation of favourable conditions for investments in the sector, and for attracting the private sector
 - To improve the quality of services rendered, and reduce their cost. On the basis of competition with state housing enterprises, the Government will develop measures to attract private business. This will include improving investment policy, providing favourable conditions for work in the sector and stage-by-stage privatisation of housing.
 - The Government will strengthen its control and take specific measures for targeted and effective utilisation of budgetary funds, loans, grants, and other investments, allocated in the sector to meet the needs there.
- c. Development of local water supply systems in rural settlements
 - The Government of the Republic of Tajikistan will take measures to improve access of the population of rural districts to clean drinking water by construction of local water supply equipment. It will also encourage all relevant central and local management bodies and donor organisations to carry out this task.
- d. Restoration and development of housing, improvement of systems for water, power and heat supply, and sanitation
 - The Government and local authorities will provide funds for restoration of housing of the socially vulnerable population.
 - Restoration and development of housing and the city infrastructure stipulated by relevant master plans will be ensured, based on contracts and funded by the population, businesses, and local budgets. Fund-

ing of maintenance of an internal local network of water, power, heat supply systems, and sanitation will be gradually transferred on a voluntary basis to organisations of housing proprietors and the population. A list of concrete measures in this direction will be specified in a relevant programme aimed at reforming the housing sector.

- To resolve social problems more speedily, the Government will undertake measures to promote investment projects related to restoring the main and local systems of water, power and heat supply, and sanitation.
- The Government will support the development and introduction of new technical equipment and technologies for servicing the sector, beginning with technologies ensuring economical use of resources.
- To ensure protection of sanitary zones during water-intake construction financed by private investment, specific actions will be undertaken to construct protective hoardings, including tall barriers, and fences around protected zones.
- The Government of the Republic of Tajikistan will assist housing-complex enterprises during the planning and implementation of municipal infrastructure development projects (water supply, sewage systems, heat supply, power and gas supply, telecommunications, and local initiatives).

7.5.4 Expected results

The basic results will be the creation of economic and organisational mechanisms for a complete restoration of systems of water supply, sanitation, and housing and municipal services in the republic; improvement of their quality; improvement of pricing policy; and creation of favourable conditions for investment and private financing, while at the same time providing less affluent families with targeted concrete assistance.

The following goals will be achieved by 2015:

- The number of people without secure access to drinking water, sanitation, and housing sector services will be halved.
- Practically all school and preschool establishments will be provided with municipal services.
- Access by the population to drinking water and sanitation services in cities (653,500) and in the countryside (4,458,500) will increase.
- New associations of owners of water supply, sanitation, and housing services will be set up that will regulate the sector.

7.5.5 Financial outlays

Financial outlays were calculated proceeding from forecasts of inflation rates of the somoni. Expenses planned for the period are US\$8.4325 billion, including US\$316.8 million from foreign investments, US\$31.028 million from the budget, and US\$843.3 million from private charges, leaving a deficit of US\$7.2414 billion, or 85.9 per cent.

7.6 Guaranteeing ecological balance

7.6.1 Current situation and problems

Tajikistan is a mountainous country. The Tianshan, Ghissar-Alai and Pamir ranges occupy 93 per cent of the territory of the country. Glaciers occupy about 6 per cent of the country and contain about 550 km³ of water. It should be noted that the environment, sustainable development, and problems of poverty are closely interconnected in this country.

Tajikistan has a relatively well-developed legislative framework for using economic tools to carry out actions in the field of environment protection, but implementation is unsatisfactory. As a result, the main task of these economic tools, i.e., promotion of ecologically acceptable activities in industry, agriculture, and other sectors of the economy, remains unaccomplished.

The basic drawback in this regard is flaws in the mechanisms of environment protection legislation; in particular, legislation and policy documents concerning privatisation do not give enough prominence to ecological matters, and they do not take into account the process of economic restructuring.

The 1996 law on protection of the environment, and the state programme for ecological education of the population, laid the foundation for comprehensive ecological education in Tajikistan. However, a series of important steps stipulated by this law and this programme has not been implemented.

Nevertheless, during the last decade Tajikistan managed to maintain a minimal hydro-meteorological network, and carry out ecological evaluations in the field of biodiversity, climate changes, desertification, and the banning of ozone-destroying substances.

Tajikistan is confronting the problem of soil salinisation and waterlogging. More than 15 per cent of irrigated grounds are saline, and 2,500 hectares are abandoned each year. Now the country has about 4,000 polluter sources registered.

Waste management, including waste created by mining and other industries, material from medical facilities, and household and other municipal wastes, is weak. Dangerous and radioactive waste products of the mining industry compose the majority of the country's wastes. They make up 77 per cent of all industrial wastes. Waste storehouses are especially dangerous. There are 22 waste storehouses in the country.

At present there are about 90 officially registered NGOs operating in the field of environment protection, although only about 30 of them are active.

Communities are mostly engaged in providing their villages with drinking water, and doing work to clean up their land and plant trees.

In the field of international cooperation, multilateral ecological agreements are important for resolving ecological problems. Tajikistan is a party to nine conventions on nature protection. A regional plan of action on the environment has been developed. The country participates actively in the implementation of the strategy developed by the Central Asian countries, as well as in the process 'The Environment for Europe'.

The following problems threaten ecological sustainability:

- Natural disasters are one of main reasons for degradation of the environment.
- Erosion, salination, and a high groundwater level are common natural phenomena resulting from the peculiarities of the ruggedness of the land and climate, and are also aggravated by bad land management practices.
- There is ineffective interdepartmental coordination.
- No analysis was undertaken in regard to how the process of privatisation impacts the environment.
- Consumers of natural resources lack ecological awareness.
- Trees are cut for firewood because other forms of energy are inaccessible.
- There is poor management and storage of wastes.
- Management of forest resources and protection of ecological systems are poor.

- Protection and rational use of water resources (surface and underground) is poor.
- Legislation on water use does not include measures for the management of watersheds.
- There is pollution of the atmosphere by mobile and stationary sources.
- Statistical reporting does not have adequate indicators of the state of the environment.
- There is a lack of complete and qualitative ecological monitoring.

7.6.2 Development priorities

1. Strengthen the institutional potential for dealing with the environment to ensure ecological sustainability.
2. Prevent natural disasters.
3. Resolve problems related to various types of land degradation.
4. Improve management and storage of wastes.
5. Protect and manage biodiversity and conservation of ecological systems.
6. Improve water resource management.

7.6.3 Basic direction of actions

- a. Strengthening of the institutional potential to ensure ecological sustainability
 - To develop relevant procedures for intersectoral policy coordination, and plans and actions for protection of the environment and sustainable use of natural resources.
 - To develop a programme to adjust payments, tariffs, and penalties for pollution, as well as a programme for rehabilitation of all networks of environment monitoring.
- b. Solution of problems of natural disasters by undertaking measures for prevention of possible emergency situations
 - To set up a mechanism for effective coordination of financing the protection of the natural environment, to ensure transparency of decision-making and targeted distribution of funds intended for priority nature-protection projects.
- c. Solution of problems related to various types of land degradation
 - To develop integrated and biological methods of pest control; to develop a relevant information base; to produce biological agents for pest control.
 - To put in place a comprehensive programme for the rational use and protection of soil resources; to improve irrigation of soils, reduce saline and waterlogged areas, and provide rationalised delivery of irrigation water.
- d. Improvement in waste management and storage
 - To reconstruct waste storehouses in faulty condition that threaten the population and environment.
- e. Protection and management of biodiversity, and preservation of ecological systems; improvement of water resources management
 - To raise the ecological awareness of managers at various levels, the general population, and directors of privatised farms and enterprises, and to provide them with knowledge about rational utilisation and protection of natural resources.
 - To ensure continuous monitoring of the implementation of measures for ecologically sustainable water resource management.

7.6.4 Expected results

Taking into consideration the diversity of nature protection activities and the difficulty of integrating them into state and branch programme documents, specifying measures and tasks in the field of ecological sustainability will, first of all, allow the Government to harmonise nature protection legislation with other general and sectoral legislation.

As a result, it will be possible to develop an institutional basis for improving the financial and economic mechanisms related to environment protection and to rational use of natural resources in various sectors of the economy.

Raising the level of nature protection awareness of all levels of the population, and introducing new, progressive technologies for preventing natural and man-made disasters and for mitigating and eradicating their consequences (based on the improvement of environmental information), will promote more effective prevention of environmental pollution and maintain ecological sustainability.

7.6.5 Financial outlays

A preliminary estimate of outlays to ensure ecological sustainability for the period to 2015 is US\$380.7 million, US\$121.7 million of which will be allocated from the budget, including US\$12.1 million from Tajikistan and US\$152.4 million from foreign aid, and with a deficit of US\$94.3 million (or 24.8 per cent).

7.7 Guaranteeing gender equality

7.7.1 Current situation and basic problems

Since independence, a series of comprehensive measures and laws have been developed and adopted in the Republic of Tajikistan aimed at raising the role and status of women, and ensuring equal rights and opportunities for men and women.

We should emphasise especially the laws that were adopted and being implemented during recent years, such as the national plan of action on raising the status and role of women for 1998 to 2005; the state programme 'The basic directions of state policy guaranteeing gender equality in the Republic of Tajikistan for 2001 to 2010', and the law 'State guarantees of gender and their implementation' (March 2005).

The state is undertaking concrete steps to achieve gender equality; the status of women is being raised, and women are encouraged to take an active role in life. In practice, however, under the influence of numerous social, economic, and cultural factors, women are actively excluded from public life. The policy implemented has had little influence on changing social relations between men and women. Legal equality does not guarantee actual gender parity. The reality is characterised by an obvious contradiction between the gender policy proclaimed by the state and actual processes in the sphere of social relations between men and women.

Under the influence of patriarchal ideology, early marriages and polygamy are being revived. The educational level of women is declining, which will lead to a decline in the social status of women, and the restriction of women to the family and housekeeping. Increasing poverty of families, a sharp reduction in the network of facilities for children, and a rise in prices for everyday services (or their absence in the countryside) have all led to a growth in the number of women housekeeping to serve their families, and the decline of paid work and public activity. In conditions of poverty and limited material resources in families, parents prefer to invest their savings in the education of sons rather than daughters.

On the other hand, the economic and social crisis, and high rate of unemployment among males, have forced some women to find work. Situations where the woman takes up the role of the supporter or co-supporter of the family are becoming more common.

Labour activity means more social mobility of the female population of the republic, resulting in a change in the traditional distribution of labour and a growth in economic activity of women, especially in the informal labour market in Tajikistan.

Since 1999, labour migration has played an important role in reducing the level of poverty in Tajikistan. About 400,000 to 500,000 Tajik migrants are working outside the country. The majority of migrants are males who migrate mostly to Russia. About half of all migrants send money to their families. According to the results of the last Survey of Life Standards undertaken by the World Bank, in 2003 money from migrant workers and other transfers (such as donor support) made up 10 per cent of the average household income.

The number of women working as hired labour (workers, office employees, collective farmers receiving wages) has grown especially quickly. In 2005, in comparison with 2000, the number of hired female workers has increased by 13.4 per cent, to 508,900. Their share of the labour market has increased from 44.2 per cent to 47.5 per cent.

At the same time, economic activity of women remains higher compared to males because of social and demographic peculiarities in the development of the Republic (a high birth rate and gender segregation in employment). According to a labour force survey undertaken in July and August 2005, the level of economic employment of males aged 15 to 75 was 77.8 per cent, compared to 55.4 per cent for women.

Average wages of women are 30 per cent to 50 per cent lower than those of males. This is explained by the low-paid economic sectors where women are employed, such as agriculture, education, and public health care. Wages in these fields are about 4 to 7 times lower than in industrial sectors (industry, construction, transportation, communications), and 83 per cent of women work in those fields.

The data of the Survey of Life Standards of the population for 2003 demonstrate that in some regions the rates of enrolment in, and graduation from, school are low for both boys and girls. The number of all pupils reduces sharply by the age of 15, i.e., the end of obligatory nine-year education. Some girls leave school at the age of 12, owing to the view that their education will not pay for itself, and to stereotypes concerning the traditional role of women. By the age of 20 and 21, the ratio of young men to women in higher educational institutions is about 4:1.

However, despite the change in gender roles in modern society, and the substantial growth in women's contribution to the national economy and to the family budget, power and property relations between men and women remain traditional.

The contradictions that constantly arise between gender stereotypes and the real role of women act as an important factor constraining the change in social relations between men and women. These contradictions are aggravated by the cultural and religious traditions of Tajik society. This affects the status of women in rural areas, where most women live.

Gender priorities are clear and have already been formulated and adopted by the Government, which is committed to their implementation within the framework of state programmes and action plans. However, considering the intersectoral character of these programmes, the priorities must be maintained in the short- and

intermediate-term strategies of development and in the PRS to ensure their effective implementation, including coordination and concentration of the limited financial resources available and their more rational use.

The gender analysis of existing state policy and real social processes has revealed a number of problems impeding promotion of gender equality and sustainable development of the country as a whole:

- Insufficient introduction of gender approaches into the basic state strategy.
- Limitations of institutional mechanisms of gender policy.
- Poor understanding of the need for gender approaches by state officials at all levels.
- Not all adopted programmes aimed at realisation of gender policy are supported by state and local budgets.
- The statistical base with respect to gender is inadequate, and the system of data collection limits opportunities for gender analysis for promotion of gender equality.
- Mechanisms of social partnership between the state, civil society, and business bodies are insufficiently developed in regard to gender policy implementation.
- Unequal access to, and control of, resources (property, land, loans, etc.). insufficient access to land, and to control of primary industrial assets, makes women in the rural areas strongly dependent on the male head of the family, reduces the potential contribution of women to the growth of agriculture, and increases their vulnerability to poverty.
- Existing gender inequality in development of human potential is shown by the unequal access of men and women to jobs and basic social well-being, including education and public health services.
- Insufficient involvement of women in the decision-making process; extremely limited opportunities for women to protect their interests, both at the level of the national society and within local communities and households.
- Violence against women.

7.7.2 Development priorities

1. Creation of effective mechanisms for gender policy implementation within the framework of reform of state administration.
2. Provision of equal gender access to resources in the sphere of business.
3. Overcoming gender disparity in development of human potential.

7.7.3 Basic direction of actions

- a. Creation of effective mechanisms for gender policy implementation within the framework of reform of state administration
 - Improvement of institutional mechanisms and the legal base of gender policy, as well as taking gender concerns into consideration when drawing up budgets.
 - Raising the gender awareness and sensitivity of state workers at all levels.
 - Improvement of the statistical base for gender analysis, and evaluation of how strategies adopted to improve gender statistics have been implemented.
 - Raising gender parity in state bodies responsible for decision-making.
 - Enhancement of partnership and coordination in realisation of gender policy.
- b. Guaranteeing equal gender access to resources in the sphere of business
 - Raising the educational level and competitiveness of businesswomen.
 - Providing equal gender access to land and other resources.

- Raising legal literacy; providing programmes to train the population to develop their own businesses.
- c. Overcoming gender disparity in the development of human potential
 - Increased access for men and women to secondary and higher education, as well as equal access to student loan, advisory, and educational services.
 - Overcoming gender stereotypes in public consciousness concerning equal rights and opportunities.
 - Prevention of violence against women, and rendering assistance to victims of violence.

7.7.4 Expected results

Goals, tasks, mechanisms, and measures proclaimed by the gender policy will be systematised and harmonised with the basic state strategies and programmes, both long- and medium-term (including sectoral, branch and regional ones).

Improvement of institutional mechanisms for the realisation of gender policy—both by adoption of relevant amendments, additions, and changes to the current legislation, and by the adoption of new legislation—is expected. To achieve a more complete statistical reporting, a database will be established for gender analysis and for the evaluation of implementation of strategies adopted to improve gender statistics.

The carrying out of a series of sectoral actions will allow the Government to raise gender awareness in state workers at all levels of power, and strengthen the role of civil society in implementing gender policy.

7.7.5 Financial outlays

An estimate of the financial requirements for dealing with gender problems is US\$115.6 million, US\$200,000 of which will come from the state budget, including US\$5.8 million from private funds and US\$36 million from foreign aid, leaving a deficit of US\$76.3 million, or 63.7 per cent.

8. Monitoring and Evaluation Indicators

An important part of the NDS process is monitoring the progress of implementation and evaluating the achievement of its goals.

The process of monitoring assumes the presence of four interconnected elements: measurement of the progress and implementation of the actions suggested; the monitoring mechanism; collection of all data required; and drawing up interim and annual reports. Monitoring will allow the Government to trace progress with respect to equality of rights, opportunities, and participation in the process of development.

Evaluation of the progress and implementation of the actions suggested. There are several types of indicators which should be used for evaluation of progress in relation to the goals of the PRS document:

- Indicators evaluating achievement of the basic goals in implementation of the NDS set by the Government. For some of these goals, data are collected on a regular basis, and progress can be traced easily, such as in mortality rates and the level of enrolment in elementary education, while other goals require carrying out special surveys, for example, access to reproductive health services and percentage of population living below the poverty line.
- Indicators evaluating the success of specific measures, e.g., improvement of the gender balance in education, the number of centres for primary public health, or number of beneficiaries for welfare programmes.
- Indicators showing whether the measures planned were achieved, e.g., approval of proposed laws and resolutions, implementation of action plans, etc.

The mechanism for monitoring progress. Several levels of monitoring are suggested, viz., at the level of projects/programmes, to compare planned results with actual ones; at the sectoral level, to monitor specific sectoral indicators and obstacles; at the local level, to evaluate regional aspects of poverty; and at the national level, by summarising the results of monitoring at the lowest levels.

Monitoring should be carried out through regular tracking of selected indicators that meet the criteria of measurability, adequacy, and low cost of data collection. The indicators should also directly reflect interim results, answering such questions as whether the planned actions were executed, whether the planned target parameters were achieved, and what the results were of the measures taken.

This will allow the Government to analyse data according to indicators not only of a quantitative, but also qualitative, character, which will make it possible to draw a conclusion and take a decision as to how the implementation of the measures planned could be made more efficient and productive.

The system of indicators should be divided into four levels:

- a. **Indicators at the international level** (including millennium goals; indicators of human development, investment attractiveness, and corruption; indicators available from donors and other international partnership organisations) will be used for international comparisons and analyses.
- b. **National indicators** (macro-indicators and PRS indicators approved by the state statistical organisation) will be used for revealing specific changes, tendencies, and problems of NDS implementation, and for revealing weaknesses and strengths, opportunities and risks.
- c. **Tracking indicators** (officially approved sectoral and regional indicators) will be tied to concrete terms and actions, and to the process of implementation of measures undertaken (it is possible to include additional, specific sectoral and branch indicators, which should be presented in the General Matrix of Indicators of Monitoring and Evaluation of the NDS by individual units under official sectoral and branch indicators).
- d. **Impact indicators (evaluation indicators)**, i.e., a qualitative and quantitative evaluation of changes which will be achieved as a result of an impact evaluation, and will form a base for decision-making and for substantiation and definition of new priorities.

Data collection. Collection of data concerning the indicators specified for monitoring will be carried out on a regular basis, and a systemic approach will be applied to data gathering according to indicators for impact evaluation.

The major part of the data, in particular quantitative data, will be submitted by the State Statistical Committee, and the quality of monitoring will depend significantly on the ability of that body to provide necessary information. As well, other ministries and departments, according to their fields of activities, will bear full responsibility for the data they collect.

Drawing up interim and annual reports. Results of monitoring and estimation should be published and submitted to all interested parties annually. Distribution of results of monitoring and evaluation will provide visibility and transparency to the implementation process. Because they will be publicly accountable, those responsible for implementing measures will manage their responsibilities better, and increase their efficiency and effectiveness.

A relevant reporting system should be developed at different levels of monitoring.

Institutional guarantees of NDS monitoring. It is necessary to set up a specialised body, namely, a groups on NDS monitoring, which will also include an advisory council (an expert advisory group) and a technical support group.

The advisory council should include both the state and its international partners as well as representatives of civil society, viz., NGOs and mass media.

To ensure successful work by the monitoring group, it is necessary to envisage and establish both horizontal communications (through local *hukumats*) and vertical ones (through departments for monitoring poverty at each ministry and department), with involvement of representatives of civil society, donors, and international partners.

9. Financing Mechanism of the National Development Strategy

Financing mechanisms for the NDS will be put into place to provide for the achievement of national goals and objectives.

The Government will undertake measures to revise funding priorities for the branches of the economy, in order to establish an effective financial system.

This will be achieved by innovation in the financial system, and attraction of additional financial resources from donors and the private sector. In this respect, it will be necessary to achieve a series of objectives promoting effective financing of the NDS:

1. Improvement of methods for managing public finances, including planning, obtaining a package of resources, and effectively using available funds.
2. Development of a meaningful dialogue between the Government and donors, to attract funding assistance from donors for achieving NDS priorities, which will harness the country's full potential.
3. Development of a constructive dialogue between the Government and private sector on attracting private investment to achieve the NDS.

To accomplish the given tasks, basic changes in methods of managing public finances are required. The annual budget is not an effective mechanism for implementation of the NDS, as it is prepared annually and cannot cover issues beyond a one-year cycle. In particular, such issues include macroeconomics, economic activities, and expected state revenues, as well as long-term state programme needs. Therefore the Government will actively introduce the ЦБП, which will be a very effective tool considering both the package of resources expected and macroeconomic units, as well as the long-term priorities of state programmes.

The Government does not possess sufficient financial and human resources for realisation of the NDS independently, that is, without the help of the international community. In this connection, an intensive dialogue with donors during the development of the NDS will continue, with intensive involvement of donors in the process of funding and achieving the NDS. As one effective mechanism that has been developed in partnership by donors and the Government is the SIP, measures will be directed to improving the process of refining and implementing the SIP. In particular, the SIP will become the main tool of state investments, and it will be integrated completely into the process of developing and implementing the state budget and the ЦБП; in addition, it

will include the programme of centralised capital investments. The state budget approved annually will include indicators on external financing of the SIP.

As the NDS is a long-term strategy, and CBII and SIP are medium-term instruments of financing, it is supposed that the PRS will be an interim document which will be the mechanism of NDS implementation. Therefore, integration of the processes of planning and implementing the PRS, CBII, and the SIP will be an important stage on the way to implementation of the NDS.

To set up a constructive dialogue with the private sector, the Government will undertake measures to create favourable conditions for business in specific sectors of the economy, the development of which can directly or indirectly result in achievement of priorities of the NDS. A dialogue between the Government and private sector will also be established in the social sphere, in particular by means of sponsors' support, and the introduction of payment for services. Development of private education is an example. The state does not possess sufficient funds to meet the growing needs of the population for basic education; therefore, establishment of private schools can ease the load on state educational institutions. As basic education is guaranteed by the Constitution, the state can allocate some funds to private schools, or exempt them from taxes up to the amount necessary for training pupils in a given private school.

New models of decentralisation of management and financing, and of autonomy of social establishments, including introduction of per capita funding in sectors of education and public health, will be introduced.



10. Appendix

Chart 1: The System of National Development

Chart 2: The System of Management of the Process of National Development

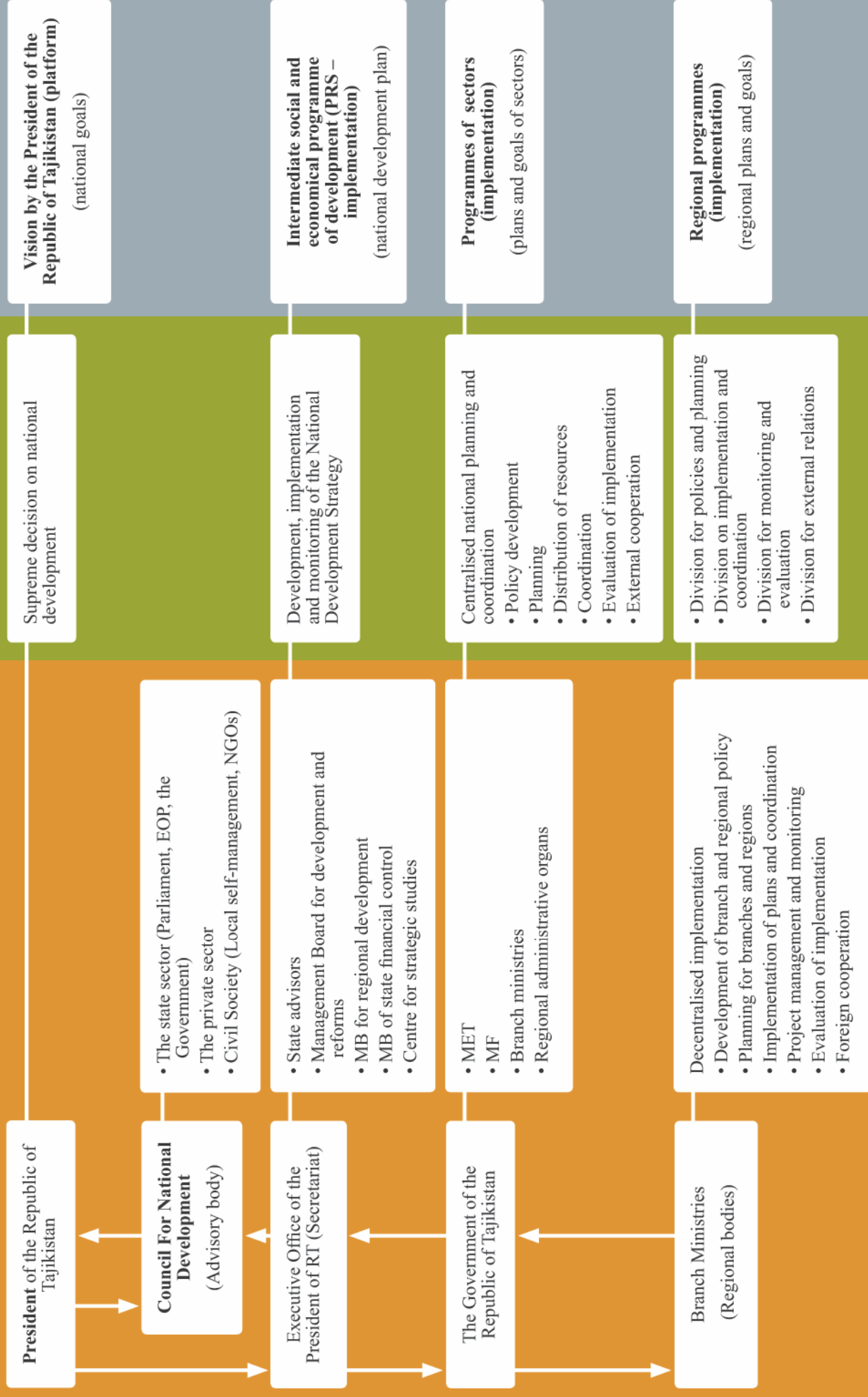
Chart 3: The Council for National Development in the System of Managing the Process of Development

The System Of National Development

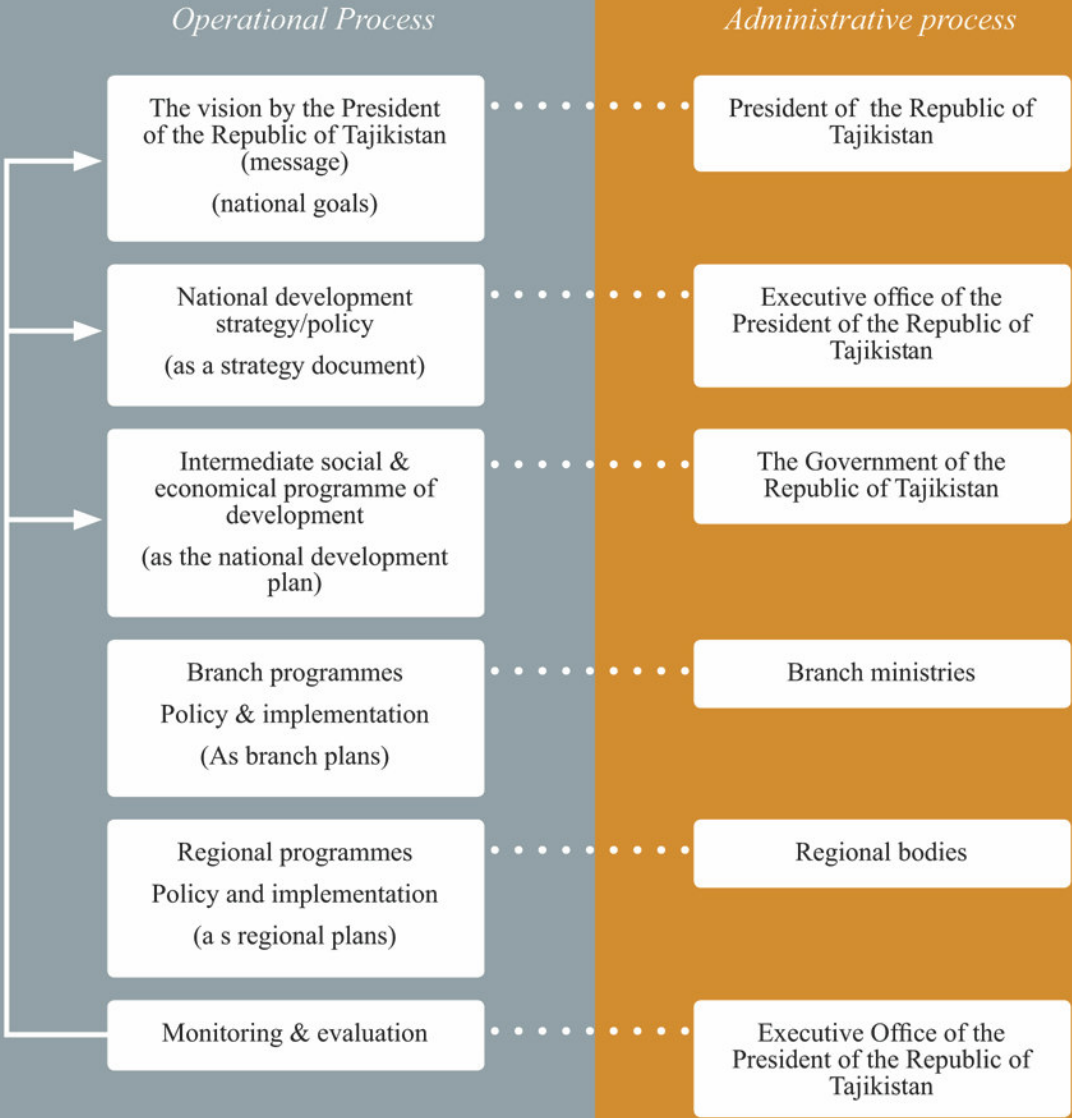
Administrative process

Function

Operational Process



The System of Management of the Process of National Development



The Council for National Development in the System of Managing the Process of Development

