# Regional and Country Profile: <br> Central Asia, Turkmenistan, <br> Kyrgyz Republic and Tajikistan 

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# Outline of the Study 

## 1-1 Backgrounds

Bordered by Asia to the east and Europe to the west, Central Asia occupies a vital position in the Eurasian Continent. Possessing abundant underground reserves of petroleum, gas, gold, uranium ore and other underground resources, and occupying a strategically vital geopolitical location, Central Asia has historically been the focus of competing interests by various powers. Central Asia is surrounded by the superpowers of Russia and China, and today is affected by regional instability in the neighboring Middle East, Afghanistan and Pakistan, etc. Especially in the aftermath of the 9/11 terrorist attacks on the United States in 2001, worldwide attention has been directed towards the stability and development of the whole South Asian region including this area and Afghanistan, and vested interests have become increasingly complicated. Moreover, against a background of growing energy demand in China, India and other parts of Asia, the stable supply of petroleum and natural gas from Central Asia helps stabilize the international energy market and enhances regional importance from the viewpoint of energy security too.

Following the dissolution of the Soviet Union in 1991, the republics of Central Asia respectively gained independence, and a number of regional organizations, i.e. the Commonwealth of Independent States (CIS), Shanghai Cooperation Organization (SCO) and Eurasia Economic Community (EAEC), etc. were established under a mélange of economic, diplomatic and military interests in Central Asia and environs.

Concerning relations with Japan, the concept of Silk Road Diplomacy was enunciated in 1997. In light of the importance of promoting intraregional cooperation in Central Asia taking common issues into account, "Central Asia plus Japan dialogue" was launched in August 2004, and close diplomatic relations have been promoted ever since. Moreover, at the second meeting of foreign ministers under this dialogue held in June 2006, the Foreign Minister of Afghanistan took part as a guest and the consensus was reached that the stability and development of Central Asia are important for the peace and prosperity of the international community in general. It was also agreed to make political dialogue, intraregional cooperation, business promotion, intellectual dialogue and cultural exchange/human resources exchange the main pillars of cooperation in this dialogue framework, and action plans covering nine fields were adopted in respect of these five pillars.

The government of Japan support to Central Asia amounted to more than US\$2.5 billion over the 10 years from 1997 to 2006. Loan aid amounting to 321.961 million yen has been approved for a total of 26 projects mainly in the transport and telecommunications infrastructure and energy sectors, however, no new projects have been approved following the Tashguzar Kumkurgan New Railway Line Construction Project in Uzbekistan in 2004. So far no yen loans have been provided with respect to Tajikistan, while there have been no yen loan projects in Turkmenistan and Kyrgyz Republic since 1998, although there have been some limited instances of grant aid and technical cooperation. In particular, concerning Turkmenistan, grant aid has only been provided in 2004, while technical cooperation has been limited to the intake of trainees only. For this reason, when JICA needs to examine conditions regarding debt and economy and aid policies including loan assistance in Central Asia including the above three countries, the required basic information is not sufficiently available. Accordingly, it is essential to implement analysis based on recent trends while paying attention to relations with Russia and China, which are strengthening their political and economic influence in Central Asia, relations with Afghanistan and Pakistan, which are integrally linked to the stability and development of the region, and relations with important donors such as the World Bank, ADB and EBRD, etc., which conduct loan assistance and so on.

## 1-2 Objectives of the Study

In view of the points indicated above, the purpose of the Study is to obtain necessary information concerning loan assistance in Central Asia, in particular to obtain and analyze detailed information concerning Turkmenistan, Kyrgyz Republic and Tajikistan, and thereby to prepare basic data for compiling a policy of support including loan aid by JICA targeting the next five years or so.

1-3 Terms of Reference of the Study
[Regional Profileof Central Asia]

- Scope of the Study

The Study shall cover Central Asia in general as well as Russia, China, Afghanistan and Pakistan. Survey and analysis of China, Afghanistan and Pakistan shall be carried out primarily from the viewpoint of Central Asia.

## Study Items

1. Outline survey and analysis of Central Asia

Developments and current conditions, etc. concerning politics, society and international relations in Central Asia over the past five years or so shall be surveyed, and future trends shall be analyzed.

- Survey and analysis of politics, society and international relations in Central Asia
- Survey and analysis of important points concerning diplomatic policy and cooperation in Central Asia with respect to Russia, China, Afghanistan and Pakistan
- Survey and analysis of trends of regional cooperation organizations (CIS, SCO, EAEC, etc.) of which the countries of Central Asia are members
- Survey and analysis of trends in support for Central Asia by donors (WB, ADB, EBRD, etc. and donors providing loan support)

2. Survey and analysis of the regional economy of Central Asia

Regional economic trends over the past five years or so in Central Asia shall be surveyed and future prospects shall be analyzed.

- Survey of the state of transition to the market economy (including performance and trends in the private sector, etc.) and analysis of future trends
- Survey and analysis of economic relations and impacts and future movements pertaining to surrounding countries (including emigrant workers)
- Survey and analysis of investment and trade movements in Central Asia


## [Country Profiles]

- Scope of the Study

Field surveys shall be carried out in Turkmenistan, Kyrgyz Republic and Tajikistan.

## - Study Items

1. Outline survey and analysis of politics and society
2. Review and summary of national development strategy
3. Survey and analysis of macro economic conditions and debt servicing ability
4. Survey and analysis of major sectors (including performance and future trends, etc. of foreign affiliated corporations)
5. Survey and analysis of trends among donors (WB, ADB, EBRD, etc. and donors providing loan support)
6. Survey and analysis of performance and future trends of Central Asian regional cooperation organizations (CIS, SCO, EAEC, etc.) in each country

## Table of Contents

Outline of the Study
Table of Contents Abbreviation Outlook of the 5 Central Asian Countries Summary .....  i
Chapter 1 Regional Economy in Central Asia ..... 1
1-1 Transition Process to a Market Economy ..... 1
1-1.1 Economic Liberalization and Privatization ..... 1
1-1.2 Public Service Reform ..... 6
1-2 Economic Relations with Surrounding Countries ..... 10
1-2.1 International Migration and Remittance ..... 10
1-3 Trends in Foreign Investment and Trade in Central Asia ..... 16
1-3.1 Foreign Investment in Central Asia ..... 16
1-3.2 Trends of International Trade in Central Asia ..... 17
Chapter 2 Development Needs and Issues of Turkmenistan ..... 27
2-1 Outline of Development Strategy and Core Sectors ..... 27
2-1.1 Outline of "The Strategy for the Economic, Political, and Cultural Development of Turkmenistan for the Period up to Year 2020". ..... 28
2-1.2 Development plan for Key Economic Sectors ..... 28
2-1.3 Features of the Development Strategy ..... 30
2-2 Analysis of Major Sectors ..... 31
2-2.1 Power ..... 31
2-2.2 Transport ..... 35
2-2.3 Water and Sanitation. ..... 39
2-3 Macroeconomic and Fiscal Analysis ..... 42
2-3.1 Macroeconomic Conditions ..... 42
2-3.2 Fiscal Conditions ..... 44
2-3.3 Debt Sustainability ..... 45
2-4 Major Donors Activities in Turkmenistan ..... 46
2-4.1 World Bank ..... 47
2-4.2 European Bank for Reconstruction and Development (EBRD) ..... 47
2-4.3 The United Nations(UN) ..... 48
2-4.4 The United States Agency for International Development (USAID) ..... 49
2-4.5 Turkish International Cooperation and Development Agency (TIKA) ..... 49
Chapter 3 Development Needs and Issues in Kyrgyz ..... 51
3-1 Outline of National Development Plan and Priority Sectors ..... 51
3-1.1 Outline of CDS-1 ..... 51
3-1.2 Challenges in Implementation of CDS-1 ..... 55
3-1.3 Outline of CDS-2 ..... 57
3-2 Analysis of Major Sectors ..... 58
3-2.1 Power ..... 58
3-2.2 Transport ..... 64
3-2.3 Water Supply and Sanitation ..... 72
3-3 Macroeconomic and Fiscal Analysis ..... 76
3-3.1 Macroeconomic Conditions ..... 76
3-3.2 Fiscal Conditions ..... 78
3-3.3 Debt Sustainability ..... 81
3-4 Major Donors’ Activities in Kyrgyz ..... 85
3-4.1 Outlook of Official Development Assistance in Kyrgyz ..... 85
3-4.2 Joint Country Support Strategy (JCSS) ..... 86
3-4.3 Major Donors’ Activities in Kyrgyz ..... 87
Chapter 4 Development Needs and Issues in Tajikistan ..... 99
4-1 Development Strategy and Priorities ..... 99
4-1.1 National Development Strategy 2015 ..... 99
4-1.2 Poverty Reduction Strategy 2007-2009 ..... 100
4-2 Analysis of Major Sectors ..... 101
4-2.1 Power ..... 101
4-2.2 Transport. ..... 109
4-2.3 Water Supply and Sanitation ..... 115
4-3 Macroeconomic and Fiscal Analysis ..... 121
4-3.1 Macroeconomic Conditions ..... 121
4-3.2 Fiscal Conditions ..... 123
4-3.3 Debt Sustainability ..... 126
4-4 Major Donors’ Activities in Tajikistan ..... 130
4-4.1 World Bank/ International Development Association (IDA) ..... 131
4-4.2 Asian Development Bank (ADB) ..... 134
4-4.3 European Bank for Reconstruction and Development (EBRD) ..... 136
4-4.4 United States Agency for International Development (USAID) ..... 138
4-4.5 Switzerland ..... 138
Reference ..... 141
Annex
1 Politics, Society and International Relations in Central Asia. ..... 1
1-1 Political Transitions and Current Conditions ..... 1
1-1.1 The Central Asia’s Changes ..... 1
1-1.2 Turkmenistan ..... 7
1-1.3 Kyrgyz Republic ..... 9
1-1.4 Tajikistan ..... 12
1-2 Social Changes and Current Conditions ..... 14
1-2.1 Central Asia in General ..... 14
1-2.2 Turkmenistan ..... 23
1-2.3 Kyrgyz Republic ..... 24
1-2.4 Tajikistan ..... 24
1-3 Transitions and Current Conditions in International Relations ..... 24
1-3.1 Central Asia Region ..... 24
1-3.2 Relations between Central Asia and Afghanistan ..... 29
1-3.3 Turkmenistan ..... 32
1-3.4 Kyrgyz Republic ..... 37
1-3.5 Tajikistan ..... 39
2 Regional Cooperation Organizations in Central Asia ..... 1
2-1 Developments of the Key Regional Cooperation Organizations in Central Asia ..... 1
2-1.1 CIS and Collective Security Treaty Organization (CSTO) ..... 4
2-1.2 Eurasian Economic Community (EAEC) ..... 5
2-1.3 Shanghai Cooperation Organization (SCO) ..... 8
2-1.4 Economic Cooperation Organization (ECO) ..... 10
2-1.5 Central Asia Regional Economic Cooperation Program (CAREC) ..... 12
2-2 Impacts and Future Direction of Regional Cooperation Organization in Central Asia ..... 18
2-2.1 Central Asia as a Whole ..... 18
2-2.2 Turkmenistan ..... 18
2-2.3 Kyrgyz Republic ..... 19
2-2.4 Tajikistan ..... 19
2-3 Regional Cooperation Project/Program by Regional Cooperation Organizations ..... 19
2-3.1 Central Asia Region as a Whole ..... 19
2-3.2 Turkmenistan ..... 25
2-3.3 Kyrgyz Republic. ..... 26
2-3.4 Tajikistan ..... 26
2-3.5 Assistances to Afghanistan by Regional Cooperation Organizations ..... 26
2-4 Roles and Policies of Donors for Regional Cooperation Organizations ..... 27
2-4.1 Direction of Activities of International Development Financial Institutions ..... 28
2-4.2 Other Donors ..... 31

|  | Abbreviation |
| :---: | :---: |
| ADB | : Asian Development Bank |
| ADF | : Asia Development Fund |
| AGO | : Aggregate Gross Outputs |
| CAC | : Central Asian Community |
| CACO | : Central Asian Cooperation Organization |
| CAEC | : Central Asian Economic Community |
| CAEU | : Central Asian Economic Union |
| CAREC | : Central Asia Regional Economic Cooperation |
| CASA | : Central Asia/South Asia |
| CASAREM | : Central Asia - South Asia Regional Electricity Market |
| CDS | : Country Development Strategy |
| CIS | : Commonwealth of Independent States |
| CSTO | : Collective Security Treaty Organization |
| DAC | : Development Assistance Committee |
| DANIDA | : Denmark International Development Agency |
| DfID | : Department for International Development |
| DRWS | : Department of Rural Water Supply |
| DSA | : Debt Sustaninability Analysis |
| EAEC | : Eurasian Economic Community |
| EBRD | : European Bank for Reconstruction and Development |
| EC | : European Commission |
| ECO | : Economic Cooperation Organization |
| ECOTA | : The ECO Trade Agreement |
| EEMAP | : Energy Emergency Mitigation Action Plan |
| ESCAP | : Economic and Social Commission for Asia and the Pacific |
| EU | : European Union |
| FAO | : Food and Agriculture Organization |
| FDI | : Foreign Direct Investment |
| GDP | : Gross Domestic Product |
| GNI | : Grossn National Income |
| HDR | : Human Development Report |
| IBRD | : International Bank for Reconstruction and Development |
| IFC | : International Finance Corporation |
| IMF | : International Monetary Fund |
| IMU | : Islamic Movement of Uzbekistan |


| IOM | International Organization for Migration |
| :---: | :---: |
| IsDB | Islamic Development Bank |
| JCSS | Joint Country Support Strategy |
| JSC | Joint Stock Company |
| MDGs | Millennium Development Goals |
| MTBF | Medium-Term Budget Framework |
| NALSG | National Agency of Local Self-Governance Affairs |
| NDF | Nordic Development Fund |
| NWFP | North-West Frontier Province |
| OIC | Organization of the Islamic Conference |
| PIP | Public Investment Programme |
| PRSP | Poverty Reduction Strategy Paper |
| RCD | Regional Cooperation for Development |
| SCO | Shanghai Cooperation Organization |
| SPC | Special Purpose Company |
| TFP | Trade Facilitation Programme |
| TIKA | Turkish International Cooperation and Development Agency |
| TPCC | Trade Policy Coordinating Committee |
| TSA | Tajikistan State Air |
| UNDAF | United Nations Development Assistance Framework |
| UNDP | United Nations Development Programme |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| WB | World Bank |
| WFP | World Food Programme |
| WHO | World Health Organization |
| WTO | World Trade Organization |

Outlook of the 5 Central Asian Countries

|  | Kazakhstan | Uzbekistan | Kyrgyz Republic | Turkmenistan | Tajikistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Head of state (President) | Nursultan Abishevich Nazarbayev | Islom Karimov | Kurmanbek Bakiev | Gurbanguli Berdymukhamedov | Emomali Rahmon |
| Prime Minister | Karim Masimov | Shafkat Miljoev | Igori Chudinov | - | Akil Akilov |
| Declaration of independence | December 16, 1991 | August 31, 1991 | August 31, 1991 | October 27, 1991 | September 9, 1991 |
| Capital | Astana | Tashkent | Bishkek | Ashgabat | Dushanbe |
| Area (km²) | 2,724,900 | 447,400 | 198,500 | 488,000 | 143,100 |
| Population $(10,000)$ | 1,550 | 2,780 | 540 | 500 | 680 |
| Ethnic composition | Kazakh $(53.4 \%)$ <br> Russian $(30 \%)$ <br> Ukrainian $(3.7 \%)$ <br> Uzbek $(2.5 \%)$ <br> Uighur $(2.5 \%)$ <br> Tartar $(1.7 \%)$ <br> German $(2.4 \%)$ |   <br> Uzbek (80\%) <br> Russian $(5.5 \%)$ <br> Tajik $(5.0 \%)$ <br> Kazakh $(3.0 \%)$ | Kyrgyz (64.9\%) <br> Uzbek $(13.8 \%)$ <br> Russian $(12.5 \%)$ <br> Dagestani $(1.1 \%)$ <br> Ukrainian $(1.0 \%)$ |   <br> Turkmenistani (85\%) <br> Uzbek (5\%) <br> Russian $(4 \%)$ <br> Others  |   <br> Tajik (79.9\%) <br> Uzbek $(15.3 \%)$ <br> Russian $(1.1 \%)$ <br> Kyrgyz $(1.1 \%)$ <br> Others  |
| Economy (USD) | GDP: 103.8 billion <br> Per capita GDP: 6,867 | GDP: 22.3 billion <br> Per capita GDP: 814.8 | GDP: 3.7 billion <br> Per capita GDP: 712 | GDP: 12.9 billion <br> Per capita GDP: 1,979 | GDP: 3.7 billion <br> Per capita GDP: 578 |
| Main industries | Mining, agriculture, metallurgy and metal processing | Cotton textiles, food processing, machine manufacture, petroleum, natural gas | Agriculture and livestock (approximately $30 \%$ of GDP), mining (gold extraction) | Mining (natural gas, petroleum, etc.), agriculture (cotton), livestock | Agriculture (cotton), aluminum production, hydropower |

Source: Prepared from the MOFA homepage "Conditions in Each Country and Region"

## Summary

Central Asia refers to the five countries of Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyz Republic and Tajikistan. Combined, these five countries have a population of approximately 59 million and GDP of approximately US $\$ 120$ billion. Situated in the center of the Eurasian Continent, Central Asia is a vast region covering some 4 million square kilometers. In geographical terms, it is surrounded by Russia, China, Afghanistan, South Asia and West Asia, and it has historically been viewed as a location of great geopolitical importance.

## Chapter 1. Regional Economy in Central Asia

## 1-1 Transition Process to a Market Economy

Following the collapse of the Soviet Union and declaration of independence in the Central Asia republics in 1991, each country has been engaged in promoting economic reforms. However, the policies, concrete contents and progress of economic reform greatly differ between each country.

Institutional regulations concerning the acceptance of direct investment do not exist in Kyrgyz Republic, Tajikistan and Turkmenistan, however, they are established in Kazakhstan and Uzbekistan. Concerning the degree of liberalization in terms of interest rates and exchange rates and so on, when viewed in terms of the liberalization index of the EBRD, Kyrgyz Republic is the most advanced country, while Turkmenistan and Uzbekistan are the most backward. However, in Kyrgyz Republic and Tajikistan, the areas of investment where overseas corporations can expect to make profit are limited, and economic risks are high. As for Turkmenistan, even though overseas corporations are interested in the natural gas and petroleum sectors, in reality it is difficult for them to enter these fields. Meanwhile, in Kazakhstan, even though regulations are in place, there is active foreign direct investment in the energy sector, and this has become the largest recipient of overseas investment in Central Asia.

Looking at the economic status of the private sector, the ratio of private sector GDP and employment is highest in Kyrgyz Republic at more than $80 \%$. However, even though systems for promoting privatization have been established, little progress has been made in the privatization of large-scale state enterprises. Following Kyrgyz Republic, Kazakhstan shows the next highest economic contribution by the private sector at $78 \%$, and revenues from privatization here are the highest out of the five Central Asian countries. In Tajikistan, the private sector accounts for more than $50 \%$ of the economy, however, the privatization of state enterprises has been limited to medium and small-scale concerns. The share of the private sector is $45 \%$ in Uzbekistan, while that in Turkmenistan is just $25 \%$, which is the lowest level in Central Asia.

## 1-2 Economic Relations with Surrounding Countries

Kazakhstan experiences the most international migration. In 2005, the migrating population was 3.7 million, which accounted for $25 \%$ of the national population. Kazakhstan also accepts the largest number of immigrants, of whom there were more than 2.5 million in 2005. International migration is next largest in Uzbekistan, where the number of emigrants is more than 2.1 million and the number of immigrants is more than 1.2 million. International migration is lowest in Turkmenistan, where the number of emigrants and immigrants number 260,000 and 220,000, respectively. In Kyrgyz Republic and Tajikistan, the number of emigrants far exceeds the number of immigrants; in fact the outgoing population is more than twice the size of the incoming one. In Kyrgyz Republic, the outgoing population is 610,000 with respect to an incoming population is 280,000 , while in Tajikistan, the number of emigrants is 790,000 while the number of immigrants is around 300,000 . More than $70 \%$ of the
emigrants from both these countries return home in a short time, and many of them are migrant workers.

Tajikistan receives the greatest amount (1,250 million US dollars) in remittances from abroad, followed by Kyrgyz Republic, which receives 739 million US dollars. On the other hand, cash transfers from Kazakhstan to overseas destinations amounted to more than US\$3 billion in 2006. This includes remittances sent by Tajik and Kyrgyz migrant workers to their home countries and indicates just how important Kazakhstan is for the economies of these countries. The most common destination for migrant workers from Tajikistan and Kyrgyz Republic is Russia, which accounts for $80 \%$ and $90 \%$, respectively. However, due to deterioration of the Russian and Kazakh economies brought about by the global economic crisis in 2008, Tajik and Kyrgyz migrant workers have lost their jobs and are being forced to return home, and the amount of remittances is falling as a result.

The remittances sent by Tajik and Kyrgyz migrant workers are largely directed towards the rural parts of those countries. From this it may be gathered that most migrant workers from the low-income nations of Tajikistan and Kyrgyz Republic come from rural parts which face particular economic hardship.

## 1-3 Trends in Foreign Investment and International Trade in Central Asia

## - Foreign Direct Investment

Foreign direct investment (FDI) to Central Asia is increasing, albeit to differing degrees in each country. Most FDI is directed towards Kazakhstan, which received a total of 37.9 billion US dollars between 1989 and 2007. Most investment is directed towards petroleum and natural gas development and mainly originates from the United States, United Kingdom, France and the Netherlands. In recent years, Kazakhstan has come to make direct investment in neighboring Central Asian countries, and this has been especially conspicuous in the financial sector in Kyrgyz Republic. After Kazakhstan, Turkmenistan is the next largest recipient of investment, accepting 3,928 million US dollars between 1989 and 2007. Investment to Uzbekistan was sluggish up to around 2005 due to government regulations, however, there has been an upturn since 2007 due mainly to Chinese investment in the natural gas and petroleum development sector and investment geared to the privatization of state enterprises. FDI to Kyrgyz Republic has been increasing since 2006 and reached 224 million US dollars in 2008. The primary investment fields are manufacturing and the financial sector, and $40 \%$ of investment in Kyrgyz Republic originates from Kazakhstan. The largest FDI project in Kyrgyz Republic is the Kumtor gold mine based on a joint venture with Canada, and the Gazprommneft Asia investment project by Russia is also a major concern. Tajikistan has the lowest FDI out of the five countries in Central Asia, and this was just 180 million US dollars in 2008. Kazakhstan investment for coal mining, etc. is increasing, and more and more Russian corporations are entering the country. As of 2008, the number of incoming corporations including joint ventures in Tajikistan was approximately 250 . Tajikistan also aims to promote hydropower development based on foreign investment, and the Sangtuda-2 hydropower plant project is currently being advanced as a BOT scheme with Iran.

## - International Trade

Looking at the Central Asia region as a whole, trade is expanding and becoming more diversified as trade relations become more active with non-transfer economies.

Kazakhstan, which has the largest economy, also has the largest trade values by far. As of 2007, the value of exports and imports in Kazakhstan was 36 billion US dollars each. After Kazakhstan, Turkmenistan and Uzbekistan have large trade turnovers. Even Kyrgyz Republic and Tajikistan, which are the smallest economies in Central Asia, are witnessing trade growth,
and the recent increase in imports to both countries has been startling. Looking at general trends in Central Asia, the primary exports are petroleum, natural gas, mineral resources and agricultural products, while the primary imports consist of energy, food, capital goods and consumer goods.

More than $80 \%$ of exports from Turkmenistan comprise natural gas, petroleum and petroleum products, while imports of machine equipment have been growing amidst a construction boom. Ukraine, which is the primary consumer of natural gas, is the greatest trade partner for Turkmenistan, and this is followed by Iran, which receives natural gas and electric power. Turkmenistan also exports electric power to Tajikistan, Uzbekistan, Turkey and Afghanistan. Concerning imports, Turkmenistan previously relied on Russia and Ukraine for food and consumer goods, however, imports from UAE, Turkey and China are now growing.

In Kyrgyz Republic, imports from China are growing dramatically, whereas trade dependence on the CIS countries including Russia is declining. Imports from China amounted to 327 million US dollars in 2007 and mainly comprised foods. Moreover, trade relations with Russia remain important, while the country still depends on Kazakhstan and Uzbekistan for supplies of petroleum and natural gas. Kyrgyz Republic has also started exporting electric power to Afghanistan, and this was one of its most important export trade partners in 2007.

Exports from Tajikistan mainly consist of aluminum, electric power (hydropower) and cotton textiles, while imports mainly comprise electric power, petroleum products, aluminum oxides, machine equipment and foods. The largest destination for aluminum exports was previously Russia, however, exports to Turkey and Norway, etc. have also been growing in recent years. Concerning electric power, although Tajikistan supplies electricity to Iran, it is unable to fully satisfy its domestic demand and thus imports electricity from Uzbekistan and Turkmenistan. Moreover, Tajikistan depends on imports of petroleum and natural gas from Kazakhstan, Uzbekistan and Azerbaijan, and it also imports bauxite, which is a raw material for aluminum, from Russia and Ukraine. Infrastructure projects based on support from China have come to be implemented in recent years, and imports of machine equipment from China have grown in line with this.

## - Expectations for Trade Growth between Central Asia and South Asia based through

 Electricity TransactionOn May 8, 2009, in Washington, the leaders of Afghanistan and Pakistan announced a joint declaration for a project concerning electric power supply from Central Asia. This is based on the concept of the Central Asia/South Asia Regional Electricity Market (CASAREM) and has been advanced since 2005 with participation by Afghanistan, Pakistan and the Central Asian nations of Kyrgyz Republic and Tajikistan as well as support from international financial agencies such as the ADB, EBRD, WB, IFC and Islam Development Bank (IsDB). As the first stage, the CASA-1000 Project is planned with a view to building a transmission network to enable trading of $1,000 \mathrm{MW}$ of power between Central Asia and South Asia. In specific terms, this aims to build a wide area transmission network for exporting surplus electricity derived from hydropower during the summer in the Central Asian countries of Tajikistan and Kyrgyz Republic to the South Asian countries of Afghanistan and Pakistan, and it is anticipated that such a wide area project will strengthen electric power trade ties between Central and South Asia.

## Chapter 2. Development Needs and Issues in Turkmenistan

2-1 Development Strategy and Priorities
In Turkmenistan, out of numerous programs and strategies, the Strategy of Economic, Politic,
and Cultural Development of Turkmenistan for the Period up to Year 2020 is regarded as the central program. Development strategy up to 2030 is currently undergoing review while taking changes in the international economic environment into account. The following goals have been raised in the development strategy: (1) Attainment of advanced nation status and high economic growth, and achievement and maintenance of economic independence and security based on introduction of new technologies and improvement of productivity; (2) Steady improvement in per capita GDP; and (3) Increase in vigorous investment activities and construction of production facilities, and so on. Under these three priority areas, the development strategy defines targets up to 2020 in the major sectors of electric power, petroleum and gas, textile industry, agriculture, transport, telecommunications, medical care and education, etc. There also appear to be strategic papers in each sector having 2030 as the target year, however, the contents of these have not yet been disclosed.

## 2-2 Analysis of Major Sectors <br> - Power

According to the Government of Turkmenistan, the country is fully self-sufficient in electric power and total generated electrical energy in 2007 was 14.33 trillion kWh. Almost all electric power is generated from Turkmenistan's natural gas. Based on expected increases in domestic demand and exports, plans are afoot to modernize existing steam power plants, etc. Turkmenistan is currently separated from the Central Asia regional interconnection system, however, it utilizes the intraregional transmission network that was built during the Soviet era in order to export electricity to Tajikistan. The primary donors have not conducted any assistance in the electric power sector and have no particular plans to do so in future.

## - Transport

The major modes of transport in Turkmenistan are railways and roads. The combined length of roads is $58,592 \mathrm{~km}$ (as of 2002), of which more than $80 \%$ is paved. Currently, road construction and repair works are being implemented on the trunk roads between Turkmenbasi Ashgabat - Mary - Turkmenabad and Ashgabat - Karaku - Dashoguz, and these are planned for completion in 2010. Moreover, the total extension of railway lines is $3,100 \mathrm{~km}$, of which $1,200 \mathrm{~km}$ has been newly constructed following the declaration of independence. In the transport sector, Turkmenistan is directing most attention to the north-south transport corridor project, which aims to build an international rail line between Kazakhstan and Iran. Also, road construction projects are planned within the framework of the Asian Highway concept. Support by international donors was provided in the urban transport project that was approved by the WB in 1997 and the repair of Turkmenbasi Port by the EBRD. There are currently no new projects planned under donor support.

## - Water Supply and Sanitation

Since between $80 \%$ and $90 \%$ of the national land of Turkmenistan comprises desert, water resources are extremely precious here. The Amu Darya River is the most important water source and, flowing through the Kara Kum Canal, this provides approximately $90 \%$ of the country's water demand. Looking at water supply conditions, there are fluctuations in water quality and access to water supply and sewage systems is inadequate. According to a survey conducted in 2006, the ratio of homes connected to the public water supply is $54.9 \%$ in the cities and just $3.1 \%$ in rural areas. As for access to potable water including that from wells and water trucks, this is $91 \%$ in urban areas and $58 \%$ in rural areas. There is concern that increased water use will lead to water shortages. Construction of a reservoir holding 1.25 billion $\mathrm{m}^{3}$ of water has been proposed, and construction of Lake Turkmen, an artificial water body, is being advanced in the Kara Kum Desert. Concerning donor support, a water supply and sanitation project that was approved in 1997 has been implemented, while UNICEF is conducting water
and sanitation projects on the community level. There are no plans for any new projects by donors at the present time.

## 2-3 Macroeconomic and Fiscal Analysis <br> - Macroeconomic Conditions

Since the economy of Turkmenistan was dependent on natural gas and raw cotton production during the Soviet era, exports of natural gas and raw cotton slumped following collapse of the Soviet Union and the declaration of independence, and this led to a severe economic crisis. After that, gas exports were resumed to Russia and the economy has enjoyed continuous growth since 1998. The economic growth in 2007 was boosted by increased production and exports of natural gas and inflation in the price of natural gas exports. However, breakdown of price negotiations between Turkmenistan's main customers of Ukraine and Russia Gazprom led to the suspension of the Turkmenistan natural gas supply ( 90 million $\mathrm{m}^{3}$ ) from Russia to Ukraine starting on January 1, 2009.

Against this background, Turkmenistan is aiming to diversify gas exports to Iran and China, etc. Moreover, it aims to diversify industry through investing natural gas revenues into chemical industries and so on; moreover, vigorous public investment is being advanced based on prosperous natural gas revenues, and the construction sector is supporting economic growth. Concerning the trade balance, against a backdrop of healthy natural gas exports, the surplus is growing every year, and the current account surplus is also growing in line with this. The international reserve including the foreign currency reserve has not yet been disclosed, although it is thought to be equivalent to 12 months of import turnover.

The Government of Turkmenistan has conventionally adopted a managed exchange rate with the official rate fixed at US $\$ 1$ to 5,200 manat, however, due to the large disparity between this official rate and the market rate, this dual exchange rate structure is viewed as a problem. Accordingly, the government unified the exchange rates and conducted a devaluation of the national currency in 2008, and denomination was implemented in January 2009. The impact of these exchange rate revisions on the trade balance is not yet clear, however, tariffs were reduced based on Presidential decree in August 2008 in an effort to reduce inflation in prices of daily necessities such as food and clothes.

## - Fiscal Conditions

Since official data on public finances in Turkmenistan are limited and the fiscal policy is unclear, it is difficult to acquire a full picture of the fiscal situation. The fiscal balance has shown a surplus since 2004, and the fiscal surplus in 2008 was equivalent to $4.3 \%$ of GDP. $90 \%$ of revenue is obtained from taxation, and tax revenues are almost totally derived from natural gas and petroleum income. Incidentally, not all revenue from natural gas and petroleum is incorporated into the government budget, however, it isn't clear how much revenue is allocated to funds and so on outside the scope of the national budget. Concerning expenditure, current disbursements account for more than $90 \%$, while capital expenditure from the general budget accounts for less than $10 \%$. Current expenditure is increasing due to rising salaries in the public sector and growth of public investment. In Turkmenistan, tariffs for electricity, gas and water are free, and subsidies are granted to 17 items including these services. Moreover, no breakdown is given for the sector-separate budget.

## - Debt Sustainability

The total debt of Turkmenistan in 2006 was US $\$ 880$ million, of which public debt assurances accounted for US $\$ 730$ million. Since Turkmenistan has not concluded any new loan agreements since borrowing funds from the World Bank and EBRD in 1997, it has made progress in returning the principal and the size of the debt has decreased. Accordingly, the
ratio of debt within the gross national income (GNI) has fallen sharply from 29.5\% in 2003 to $8.9 \%$ in 2006. The Government of Turkmenistan aims to receive overseas funding in the shape of investment rather than loans, so it is expected that there will be no sudden jumps in the country's long-term debt burden from now on.

## 2-4 Major Donors' Activities in Turkmenistan

The Government of Turkmenistan traditionally adopted a negative approach to foreign aid based on its policy of neutrality. In particular, having the benefit of revenues from abundant petroleum and natural gas resources, it has displayed little interest in accepting loans. However, in line with the open door policies that have been advanced under the administration of President Berdymukhamedov since 1997, Turkmenistan is gradually becoming more open to accepting assistance from abroad. Looking at donor support trends for the period between 2003-2007, grant aid donors account for the highest share of both bilateral and multilateral aid, while there are hardly any examples of loan aid. Primary donors comprise the United Nations group centering on the UNDP and UNICEF as well as the United States. Turkey has been the largest donor over the past five years. Moreover, the EU aims to successively expand investment to Turkmenistan based on its Central Asia strategy. In future it intends to focus attention on economic reform, support for transition to the market economy, capacity building, promotion of civilian society, and development of agriculture and rural villages.

## Chapter 3. Development Needs and Issues in Kyrgyz Republic

3-1 Outline of the National Development Plan and Priority Sectors
Following implementation of the Poverty Reduction Strategy Papers (PRSP) up to 2005, the Government of Kyrgyz Republic, recognizing problems in the areas of unemployment, economic structural reform, low income levels among vulnerable members of society, and issues among women and children, compiled the Country Development Strategy 2007-2010: CDS-1. Furthermore, in consideration of recent international conditions and the effects of inflation in energy and food prices, it updated CDS-1 and compiled the Country Development Strategy 2009-2011: CDS-2 in February 2009.

## - Outline of CDS-1

CDS-1 covers four priority areas, i.e. 1) Extension of latent economic capacity, 2) Eradication of corruption, 3) Social development, and 4) Environmental protection. In order to attain the goals prescribed in each area, the government considers it necessary to prepare the environment for social and political stability and implementation of macroeconomic policies, etc.

## - Outline of CDS-2

CDS-2 covers four strategic pillars, i.e. 1) Qualitative improvement of economic growth, 2) Qualitative improvement of governance, 3) Qualitative improvement of national lifestyles, and 4) Qualitative improvement of the environment, and its basic direction is the same as CDS-1. In reflection of the indirect effects of the global economic crisis (higher unemployment due to the return of migrant workers, etc.), instability of fuel and food prices, etc., deterioration of the socioeconomic environment in Kyrgyz Republic and lack of progress in institutional reforms, the socioeconomic target values in CDS-2 have been downgraded from CDS-1.

At the same time, the Ministry of Finance has compiled the budget framework for 2009-2011 reflecting the priority fields of CDS-2. The budget framework for 2009-2011 requires less funding than the budget framework for CDS-1. The funding required in the event where all the projects planned in CDS-2 are implemented is 289.4 billion som, however, there is a shortfall of 95.5 billion som.

## 3-2 Analysis of Major Sectors <br> - Power

The electric power industry accounts for 5\% of GDP and 16\% of industrial production, however, per capita electricity consumption in Kyrgyz Republic was 2,379 kWh in 2007, which was the lowest level out of the five Central Asian countries. Combined power generating capacity is 3,709 MW, of which hydropower accounts for $2,950 \mathrm{MW}$ or roughly $80 \%$. Hydropower generating capacity in Kyrgyz Republic accounts for more than 30\% of the total hydropower generating capacity (8,915 MW) of four countries (Kyrgyz Republic, Tajikistan, Uzbekistan and Kazakhstan) in Central Asia.

Kyrgyz Republic restructured the electric power sector and realigned the industry departments in 2001. Currently, there are one power generating company, one power transmitting company and four power distribution companies. The State Energy Agency supervises the energy sector overall, while the Department of Fuel and Energy Complex under the Prime Minister is responsible for compiling policy in the sector.

The electric power sector is confronted with numerous problems. Winter heating and electric heating have been promoted under government support and the demand for electricity is growing, however, it is becoming increasingly difficult to secure sufficient power generation during the winter due to the falling water level in Toktogul Reservoir, which accounts for $90 \%$ of electricity generated in Kyrgyz Republic. Problems also exist regarding the business running of the electric power utility. In the absence of transparency, the industry generates a deficit of 2.4 billion som and makes the utility a loss-making concern. Although electricity tariffs have been raised almost to the level required to cover operating expenses, unpaid tariffs amounted to 3.3 billion som as of January 2008, and $72 \%$ of citizens were in arrears in their electricity tariff payments. Furthermore, output is declining and energy losses are becoming more serious due to deterioration of thermal power plants and district central heating systems, and power outages are becoming increasingly frequent.

The ADB and WB are providing support to the electric power sector in Kyrgyz Republic. Most recently, the WB approved the Energy Emergency Assistance Project in November 2008. Moreover, the CASA-1000 Project for promoting electricity exports from Central Asia to South Asia, and a project for construction of a transmission line between Kyrgyz Republic and Tajikistan are currently being implemented. Also, it is expected that Russia, China and Kazakhstan will provide support for the project to construct Kanbarata hydropower plant (1 and 2 ) with total capacity of $2,140 \mathrm{MW}$.

## - Transport

Transport is mainly conducted overland by roads and rail. The total extension of roads in 2008 was $34,000 \mathrm{~km}$, of which $4,136 \mathrm{~km}$ comprised international highways linking Kyrgyz Republic to surrounding countries, $5,678 \mathrm{~km}$ was national highways, and the remainder was provincial roads. Only around $20 \%$ of all road length in Kyrgyz Republic is paved. The Ministry of Transport and Communication has jurisdiction over international highways, national highways and some provincial roads, however, due to budget constraints, urban roads have to be maintained by municipal governments, while provincial roads are managed and maintained by villages or the private sector.

The total length of rail lines is 426.6 km . The rail network consists of the mutually independent south line and north line, which were constructed during the Soviet era. These form part of the Trans-Asia Corridor connecting Kyrgyz Republic to Russia via Uzbekistan and Kazakhstan, respectively. Infrastructure is in a deteriorated condition, however, it is able to cope with existing transport volumes.

Economic development in Kyrgyz Republic is constrained by the fact that it is a landlocked country and the population is only 5.4 million. Accordingly, the construction and strengthening of transport networks with surrounding countries represents an important issue for achieving economic development via trade expansion. However, since the government budget for road rehabilitation and construction is limited, Kyrgyz Republic must depend on support from donors. Also, road maintenance is not adequately carried out due to insufficient budget.

Support for the transport sector in Kyrgyz Republic is conducted by various donors. Among those, the ADB, Islamic Development Bank (IsDB) and EBRD implement numerous projects centering on road rehabilitation. As for railways, in view of its interest in realizing a transport network connecting Asia to Europe, the European Commission (EC) is supporting the implementation of a feasibility study for construction of a rail network connecting Kyrgyz Republic to China, Kazakhstan and Uzbekistan, etc.

## - Water Supply and Sanitation

The volume of recyclable water resources in Kyrgyz Republic was 46 billion $\mathrm{m}^{3}$ per year in 2007. However, since Kyrgyz Republic has signed agreements to supply agricultural water to the downstream countries of Kazakhstan and Uzbekistan, the reserves it can actually utilize are only 21 billion $\mathrm{m}^{3}$ per year.

Following the declaration of independence, water supply and sewerage services in urban areas have been conducted by the provincial public utility Vodakanals, while in rural areas they have been conducted by rural local governments called Ayil Okmotu in cooperation with the National Agency of Local Self-Governance Affairs (NALSG) and Department of Rural Water Supply (DRWS).

The ratio of the population with access to the improved water supply stood at roughly $90 \%$ in 2006. However, there was a disparity between urban areas and rural areas, with the ratio standing at $99.7 \%$ in the former and $82.2 \%$ in the latter in 2006 . Access to sanitary services is statistically almost the same in urban areas and rural areas. In 2006, 93\% of the overall population had access to such services. However, local utility operators in urban areas do not set tariffs at a sufficient level to break even; moreover, they are unable to conduct sufficient plant investment and rehabilitation due to budget constraints, and they are experiencing business difficulties because of deteriorated facilities, etc. Moreover, in rural areas, since the Ayil Okmotu do not possess the funds or human resources needed to implement and expand sustainable water supply, water supply services have declined badly compared with the situation before the declaration of independence. As a result, rural households are forced to take water from shallow wells, irrigation water and rivers, and this is leading to sanitary problems. Concerning access to safe water and sanitation, it is necessary to bear in mind that disparities may exist between official statistics and actual conditions.

Public water supply tariffs are increasing every year. Whereas the per capita tariff was 16.3 som per month in 2003, this had increased to 22.53 som per month by 2007. Meanwhile, the tariff for hot water remained almost the same at 57.98 som in 2003 and 58.03 som in 2007. However, in any case, current tariff settings are far below the level required to cover operation and maintenance costs.

The WB plays the most important role in donor assistance for the water supply and sewerage sector. The WB has so far implemented improvements to the regional water supply and irrigation water supply via the rural water supply and sanitation project (Phase I: 2001 and Phase 2: 2009) and the water management improvement project (2006). Furthermore,
concerning the improvement of water supply in urban areas, the EBRD is expected to approve support for the Bishkek water supply project in June 2009.

## 3-3 Macroeconomic and Fiscal Analysis

## - Macroeconomic Conditions

Kyrgyz Republic has a weak industrial base with the service sector prone to fluctuations in the global economy, and the economic structure is easily affected by growth in gold production. Looking at the breakdown of GDP in 2006, agriculture accounted for $32 \%$, manufacturing for $19.6 \%$ and service sectors for $48.4 \%$. Whereas the shares of the agricultural sector and manufacturing sector are declining, the share of the service sector is going up. Looking at the GDP growth rate, this was minus $0.2 \%$ in 2005 due to a sharp drop in gold production and negative agricultural growth in that year, however, it has since displayed recovery and stood at $8.2 \%$ in 2007 and $7.5 \%$ in 2008. However, due to negative economic growth in Russia and Kazakhstan, which exert a major influence on the economy of Kyrgyz Republic as primary trade partners and sources of remittances from migrant workers, the IMF estimates that GDP growth in 2009 will be less than $1 \%$.

Furthermore, concerning inflation, this was fairly stable at between 3-5\% up to 2006, however, with Kyrgyz Republic being dependent on imports of petrochemical products and foodstuffs such as wheat and so on, it has been affected by the recent global inflation in energy and grain prices. In particular, prices jumped sharply in the latter part of 2007, and the consumer price index in December 2007 was more than $20 \%$ up on the same month the previous year. Moreover, following a price hike in the electricity tariff by the Government of Kyrgyz Republic, average inflation in 2008 was $24.5 \%$, representing a $10.2 \%$ increase over 2007. Currently, although no major impacts such as wage hikes and so on are occurring, fund management conditions are becoming increasingly difficult due to deteriorating business conditions in Kazakhstan parent banks, which own half the capital employed by banks in Kyrgyz Republic, and there is concern over reduced fluidity in the future.

## - Fiscal Conditions

The fiscal balance of Kyrgyz Republic is improving. The fiscal balance in 2003 showed a deficit of approximately 680 million som, however, by 2007 this had been turned into a surplus of 130 million som. In 2008, in spite of increased expenditure resulting from higher salaries and fuel costs, the deficit was limited to $1.9 \%$ of GDP due to reduction of unnecessary expenditures and higher than expected revenue. The total amount of revenue excluding grants was 43.205 billion som in 2007, and of this taxation accounted for $78 \%$. Total expenditure was 35.865 billion som, of which 29.481 billion som was current expenditure and 6.384 billion som was capital expenditure. Moreover, the government lowered the consumption tax rate from $20 \%$ to $12 \%$ in January 2009, raising concerns that tax revenues will decline, however, the government forecasts that tax revenue will increase on the back of economic growth from now on. The government previously compensated for the fiscal deficit through overseas borrowing, however, it now relies on domestic borrowing.

Looking at the sector-separate breakdown of expenditure, most expenditure is directed towards education, followed by other social sectors such as social security, welfare and public health, etc. The Government of Kyrgyz Republic expanded support for people living in poverty in October 2008, raising the amount of social security from US\$3 to US\$4 per person. The costs of this will initially be covered by grants from donors, however, they will eventually be covered by government funds.

Looking at the budget in the CDS (2006-2010), the funding situation differs greatly according to each sector. Concerning the social sector, since funding is largely derived from support by
donors, there is not much of a shortfall, however, concerning the energy, manufacturing, agriculture and small businesses development sectors, where funding is scheduled to be obtained from private sector investment, only limited funding has so far been secured. Concerning the transport infrastructure sector, out of the budget of 2.662 billion som, funding for 2.337 billion som has still not been secured. Looking at the CDS overall, whereas the overall required budget is 367.29 billion som, only 106.12 billion som has been secured, while the remaining 261.17 billion som (US\$6.218 billion) will need to be raised from now on.

## - Debt Sustainability

The total debt of Kyrgyz Republic in 2006 was US $\$ 2.381$ billion, equivalent to $85.6 \%$ of the GNI, and debt servicing payments were equivalent to $5.7 \%$ of export turnover. Debt indicators show an improvement every year, and the ratio of total debt to GNI fell 23 points from $109 \%$ in 2003, while the ratio of debt servicing payments to exports fell sharply from $19.8 \%$.

According to the base scenario adopted in the debt sustainability analysis (DSA) conducted by the WB and IMF in December 2008, domestic borrowing is forecast to become an important source of funds for covering the fiscal deficit in Kyrgyz Republic in the medium term. In view of development of the domestic financial market up to 2008, it is expected that domestic borrowing will come to account for one-third of the total public debt. It is forecast that closure of the Kumtol mine in 2014-2015 will lead to a reduction in income tax revenue, however, in the long run it is expected that income tax revenue will recover and, combined with reductions in expenditure, it is judged that sustainability of the public debt indicator will be maintained. However, the debt indicator in Kyrgyz Republic is vulnerable with respect to fluctuations in actual GDP and exchange rate, and there are fears that the long-term debt indicator could deteriorate badly particularly if the real GDP should fall.

## 3-4 Major Donors' Activities in Kyrgyz

Taking advantage of the government emphasis on international assistance and cooperation, Kyrgyz Republic was selected as a pilot country for compilation of the Joint Country Support Strategy (JCSS). While being compiled with a view to supporting the attainment of goals under the national development strategy (CDS) of Kyrgyz Republic, this also points out issues in the CDS. In addition, it specifies support areas for priority fields in the CDS and sets unique support policies and fields while considering the mandate and specialist areas of each donor. In July 2007, a Joint Country Support Strategy (JCSS) was compiled by the United Nations, WB, ADB, DfID and Swiss Development Cooperation Agency, and the EC and Germany subsequently joined it in December 2007.

In terms of cumulative assistance so far, the WB is the largest donor followed by the ADB. Support from Turkey has been increasing over the past five years, followed by the United States, WB and ADB. It is also necessary to consider assistance by Russia outside the scope of OECD/DAC support to Kyrgyz Republic. At the EU summit meeting that was held at the start of February 2009, Russia declared it would provide more than US $\$ 1.3$ billion of crisis response assistance in the shape of fiscal support, concessionary loans (similar conditions to IDA), debt swaps and investment to the Kanbarata-1 hydropower plant based on a joint venture with Kyrgyz Republic.

## Chapter 4. Development Needs and Issues in Tajikistan

4-1 Outline of Development Strategy and Priority Sectors
Tajikistan has compiled the long-term National Development Strategy (NDS), which has 2015 as the target year, and the medium-term Poverty Reduction Strategy (PRS) 2007-2009, which is the successor to PRSP 2002-2006. The NDS indicates the priority fields and direction for
long-term strategy, while the PRS constitutes a three-year action plan as a means for achieving the NDS. The NDS and PRS share the same goals and priority issues and comprise comprehensive strategies.

According to the NDS, the national goal up to 2015 is as follows: Within an environment of market economy, respect for human rights and fair opportunities for people to realize their own potential, to strengthen social and political stability and realize economic prosperity and the social welfare of the Tajikistan people. In order to achieve this goal, the NDS requires the implementation of administrative reforms, nurturing of the private sector, improvement of the investment environment, and development of human resources.

The PRS, which is the medium-term strategy for 2007-2009, categorizes sectors into three blocks and defines problems, priority fields, main activities and expected outputs according to each block. In the general systems block concerned with achieving economic growth and improving social services, priority fields are defined as administrative reform, macro economic development, improvement of the investment environment, nurturing of the private sector and entrepreneurs, regional cooperation, and integration with the global economy. In the physical infrastructure block that supports economic growth, the following fields are covered: food security, development of the agricultural sector, and development of infrastructure, energy and industry. And, finally, in the access block referring to access to social services, priority fields are defined as development of the public health system, development of the education system and science, expansion of access to water supply, sanitation, residential and local government services, improvement of social welfare, promotion of gender equality, and sustainable environment.

## 4-2 Analysis of Major Sectors <br> - Power

Power generation, transmission and distribution are carried out by the state enterprise Barki Tajik throughout Tajikistan except in Gorno Badakshan Autonomous Region (GBAO). Services in GBAO are provided by the private Pamir Energy Company. Overall generated electric energy in Tajikistan is $15,244 \mathrm{GWh}$, of which $99 \%$ is derived from hydropower. However, the power consumption is greater than the generated electric power at $15,291 \mathrm{GWh}$, resulting in a very tight electricity demand and supply situation. Hydropower generated in Tajikistan is directed towards the country's primary industry of aluminum refining and is also used for export, while power supply for general uses is either imported from Uzbekistan and Turkmenistan or is derived from thermal power generation.

Since Tajikistan is blessed with abundant water resources, it regards the construction of new hydropower plants as a top priority issue. Hydropower is not only a means of responding to the domestic demand for electricity, but considering Tajikistan's dearth of mineral resources, the government aims to acquire foreign currency through exporting electricity. Work is already being advanced on the construction of Sangtuda-1 power plant ( 670 MW), Sangtuda-2 power plant ( 220 MW ) and Rogun hydropower plant units 1 and 2, and these facilities are scheduled to go into operation by 2012. In addition, responding to its domestic electricity shortages, Tajikistan has concluded five-year agreements for the import of electricity from Uzbekistan and Turkmenistan. Turkmenistan is still partially connected to the Central Asia Power System (CAPS), from which it seceded after achieving independence, and it conducts power transmission via this. Moreover, work on construction of a 500 kV transmission line connecting Kanbarata in Kyrgyz Republic with Dushanbe is being advanced in order to secure imported electricity. Also, there are plans for construction of a transmission line between Kojend and Dushanbe under a loan from China.

## - Transport

Domestic transport in Tajikistan is dominated by road transport, which accounts for $99.8 \%$ of freight transport and $96.6 \%$ of passenger transport. In terms of international transport, railways (passenger: 32\%, freight: 95.9\%) account for a higher share than road transport (passenger: $25.9 \%$, freight: $3.5 \%$ ), although the share of road transport has been growing rapidly since 2000. The total extension of domestic roads and railways as of 2004 was $12,500 \mathrm{~km}$ and 500 km , respectively. Most of the domestic road network was constructed during the Soviet era in the 1970s, however, due to damage caused by the post-independence civil war, repeated natural disasters and absence of appropriate maintenance and repair activities, the roads have fallen into a state of disrepair.

In consideration of the importance of the transport sector, the Transport Sector Master Plan (2009) was compiled under technical cooperation from the ADB. This outlines a medium to long-term policy emphasizing the rehabilitation of roads geared to reducing transport costs and times. In particular, it includes plans for implementing the intensive rehabilitation of important domestic highways and international highways connecting with China and other surrounding countries with a view to improving and strengthening the road network.

Railways play an important role in international trade, however, since the existing rail network has adequate capacity to handle projected transport volume up to 2025, the development priority is not as high as for roads, and future developments will be influenced by external factors and the extent of recovery of domestic industries, etc. In the short-term (2009-2014), attention will primarily be directed towards the upgrading, repair and maintenance of existing railway infrastructure.

The ADB is actively providing support to the transport sector in Tajikistan. Moreover, the EBRD is engaged in assisting maintenance of the road network and providing support to the aviation sector.

## - Water Supply and Sanitation

The volume of recyclable water resources in Tajikistan was 66 billion $\mathrm{m}^{3}$ per year in 2007. However, since Tajikistan has signed agreements to supply agricultural water to the downstream countries of Kazakhstan and Uzbekistan, the reserves it can actually utilize are only 16 billion $\mathrm{m}^{3}$ per year.

The state enterprise KMK (Kochagii Manziliu Kommunali), working through 180 affiliated companies throughout the country, operates urban area water supply and sewerage services, district heating and solid waste treatment, etc. However, $70 \%$ of the water supply and sanitation infrastructure is in a deteriorated state, and no investment is being provided for implementing appropriate repairs and maintenance due to the lack of funds.

The ratio of the population with access to the improved water supply stood at roughly $67 \%$ in 2006. However, there was a disparity between urban areas and rural areas, with the ratio standing at $58 \%$ in rural areas compared to $100 \%$ in urban areas in 2006.

In the area of sanitary infrastructure, water treatment facilities, water pipes and so on are deteriorated or damaged, and this situation not only has a detrimental effect on water quality but is also causing disruptions to water supply. According to the baseline survey conducted under the WB provincial cities infrastructure construction project, the ratio of population with access to public water supply for at least 16 hours a day is highest in Rasht at $68 \%$ and lowest in Kanibadam at 2\%.

The Water Sector Development Strategy in Tajikistan was compiled under support from the UNDP inn 2006 with a view to resolving these issues. Also, the WB and EBRD provide support for water supply projects.

## 4-3 Macroeconomic and Fiscal Analysis

## - Macroeconomic Conditions

The economy of Tajikistan displayed a high growth rate of around $10 \%$ in the early 2000s, however, this dropped slightly to around $6 \%$ in 2005 and 2006. According to the ADB, the economic growth rate in 2008 was expected to reach $7.9 \%$ in spite of negative factors such as declines in aluminum and raw cotton production.

Inflation dropped to single digits in 2004 and 2005, however, it has been rising since 2006. Tajikistan has also been affected by the worldwide inflation in energy and grain prices, with the consumer price index and food price index rising to $19.7 \%$ and $25.5 \%$ respectively in 2007. The impact on food prices has been especially severe.

Tajikistan's trade deficit has been increasing since 2003. Whereas the trade deficit stood at US $\$ 84$ million in 2003, it grew to more than US $\$ 1$ billion by 2007. The ratio of the trade deficit to GDP reached double digits in 2005 when the value of imports was seven times greater than the value of exports. This massive trade deficit is offset by remittances sent home by migrant workers living mostly in Russia and Kazakhstan.

The current deficit ratio to GDP was previously steady at less than $1 \%$ (except in 2004), however, the sudden trade deficit has caused this also to increase, and it was estimated to be $11.2 \%$ in 2007 and $9.3 \%$ in 2008. Although the global economic crisis is not having any direct impacts on Tajikistan, since remittances from migrant workers account for $50 \%$ of GDP, a reduction in these could have a serious impact on the economy. This contraction in the current balance is leading to the large-scale deterioration of the foreign currency reserve. The international reserve in 2008 was estimated as US $\$ 169$ million, equivalent to the value of one month's imports. At the time of the field survey conducted in March 2009, it was said that the foreign currency reserve had further contracted to just 2-3 weeks of import turnover.

## - Fiscal Conditions

Tajikistan has maintained a fiscal surplus since 2002. The surplus in 2007 stood at 220 million somni, and a surplus was again secured in 2008. Reasons for this are given as growth of the nominal GDP and expansion of revenue due to improved management of taxes. In terms of the current balance, expenditure is less than revenue and a surplus is secured. However, capital expenditure on infrastructure projects, etc. in the public investment plan (PIP) is dependent on deficit finance that has to be covered by external funding mainly from donors. Overall capital expenditure is equivalent to $13.8 \%$ of GDP, of which the portion obtained from external funds is $9.3 \%$ and the portion obtained from domestic funds is $4.5 \%$.

In the PRS (2007-2009), budget allocations, secured sources of funds and expected funding shortfalls are specified according to each sector. The largest budget allocation has been reserved for energy development targeting hydropower development projects. The next largest budget allocations are directed towards industrial development and transport development.

## - Debt Sustainability

The total debt of Tajikistan is generally static at around US\$1.1 billion, however, since progress is being made in repayments of the principal on long-term debt and the economy is growing, the ratio of foreign debt to the GNI is declining. Moreover, under support from the IMF and WB, Tajikistan has compiled the Program of Public External Borrowing of the Republic of Tajikistan
for 2009-2011, in which it aims to manage debt at a level equivalent to less than $40 \%$ of GDP.
The major lenders to Tajikistan are international financial agencies such as the WB and ADB, and loans from such institutions have increased six fold over the past 10 years. At the end of 2008, $50 \%$ of Tajikistan's external debt was borrowed from international financial agencies. In the past two years, China has increased its lending disbursement, and almost all the increase of US $\$ 277$ million in Tajikistan's debt in 2008 was accounted for by loans from China. On the other hand, debts towards Russia dating back to the Soviet era have largely been reduced thanks to debt equity swaps.

The debt risk of Tajikistan remains high as indicated by the findings of the DSA in 2007. Based on the analysis findings, in the event where investment-fueled growth is not realized, it is possible that the country's debt sustainability will diminish further due to deterioration of the macro economy and additional borrowing of non-concessionary loans. Accordingly, it is necessary to carefully scrutinize new loans and large-scale investment projects and make sure that external funds are utilized in a productive manner.

## 4-4 Major Donors’ Activities in Tajikistan

Tajikistan has established the Donor Coordination Council in order to coordinate donors, and Switzerland currently serves as the chairperson for this. In addition, a Joint Country Support Strategy (JCSS) is currently being compiled by 12 donor organizations including the ADB, WB and so on. Preparations for this JCSS were commenced in June 2007, and it is expected to receive approval in the middle of 2009.

Looking at donor support figures over the past five years, the United States (USAID) has been the biggest donor, followed by the World Bank (IDA), EC, ADB and Government of Switzerland. Moreover, in more recent times, countries such as China, Russia and Iran outside the scope of OECD/DAC have become more active and are now offering major loans to Tajikistan.

## Annex

## 1. Politics, Society and International Relations of Central Asia

## 1-1 Political Transitions and Current Conditions

The national borders, country names and languages (ethnic tongues) of the five Central Asian countries originated out of policies enforced during the Soviet era.

Both during the era of Soviet control and in the process of building independent republics after collapse of the Soviet Union, "nation states" have been formed according to ethnic groupings while dismantling transnational awareness defined by religion and culture. Even though the principle of ethnic belonging has been adopted as the basis for dividing territory, in reality the ethnic divides do not coincide with actual national borders. Moreover, irrationalities abound in that enclaves exist within countries, while infrastructure constructed during the Soviet era sometimes makes it necessary to cross national borders just to get from one major city to another in the same country. This irrationality is triggering ethnic clashes and confrontations between countries vying for water and energy resources.

Concerning the political setup in the Central Asian republics, each country adopts an authoritarian presidential system characterized by political factionalism based on nepotism, blood relations and territorial connections.

## - Turkmenistan

Turkmenistan declared its independence in October 1991. President Niyazov, who died suddenly in 2006, served as the First Secretary of the Communist Party of the Turkmen SSR during the Soviet era and then held the position of supreme leader following independence. Turkmenistan was subjected to international criticism for the cult of personality surrounding former President Niyazov and the autocratic political monopoly of the Democratic Party of Turkmenistan. Following the death of President Niyazov, Gurbanguly Berdymukhamedov was nominated as acting President and he was subsequently elected as the new President of Turkmenistan. President Berdymukhamedov passed a revision of the constitution in September 2008, resulting in adoption of a unicameral system to replace the bicameral system and strengthening the authority of the Mejlis parliament. In reality the new administration is not very different from the previous one, however, in the Mejlis elections held in 2008, some moves towards democratization were observed with the acceptance of foreign election observers and standing of multiple candidates, etc.

## - Kyrgyz Republic

Kyrgyz Republic declared its independence in 1991. The country’s first president, Askar Akayev, was President of the Kyrgyz Academy of Sciences and, unlike the leaders in the other Central Asian republics, he had not previously served as First Secretary of the Communist Party. However, following the strengthening of presidential authority and establishment of an increasingly autocratic political system approved by referendums in 1996 and 2003, Kyrgyz Republic followed the authoritarian political path taken by the other Central Asian republics. Then, in March 2005, the "Tulip Revolution" occurred, forcing President Akayev into exile and resulting in the birth of a new administration under President Bakiyev. Although this represented the capture of government by dissident groups, the Tulip Revolution only led to the adoption of piecemeal democratic policies, while no major policy changes have been effected.

## - Tajikistan

Tajikistan was the only Central Asian republic to experience civil war in the aftermath of independence. Following the declaration of independence in 1992, the conflict pitting factions loyal to the former Communist Party against anti-establishment groups including Muslims intensified and escalated into a civil war that claimed the lives of approximately 60,000 people until a peace accord was reached in June 1997. In terms of the political system, the presidential system was replaced by a congressional system in November 1992, followed once more by reversion to the presidential system in 1994. The current President of Tajikistan, Emomali Rahmon, formerly served as the Speaker of Parliament during the time of the congressional system, and he assumed the office of President following his victory in the presidential elections that were held in November 1994.
The peace process was finally completed following the implementation of a referendum on constitutional reform in September 1999, the presidential election of November 1999 and the parliamentary elections of 2000. In November 2006, President Rahmon was reelected in the second presidential election held following the peace accord, and the ruling party had landslide victories in the upper house and lower house elections that were held in 2005. Tajikistan is the only Central Asian republic to legally recognize an Islamic political party. The government accepts the domestic trend towards Islamist renaissance, however, at the same time the issue of how to quell Islamic extremism is one of its biggest challenges. Tajikistan still contains elements of instability even following the attainment of peace, and when the situation in neighboring Afghanistan is taken into account, political instability in Tajikistan has the potential to destabilize the whole of Central Asia. For this reason, the United States and Russia are exercising vigilance over the situation in Tajikistan.

## 1-2 Social Changes and Current Conditions <br> - Cultural and Social Conditions

Almost 18 years have passed since the republics of Central Asia achieved independence, and during this time the construction of appropriate political and administrative organizations, implementation of economic reforms including transition to the market economy, and development of directional ideology for fostering national identity have been important issues in the fledgling republics. Nationalism based on nominal ethnic groups has been enunciated as the ideology to govern national peoples in the place of Marxism-Leninism. Although the new nationalism is based on nominal ethnic groups ${ }^{1}$, such nationalism contains mixed strands of Turkic nomadic culture, Persian culture, reversion to traditional Islamic values, as well as Russian culture and the cultural legacies of the Soviet era.

Following their respective declarations of independence, the republics of Central Asia have had to purport Islamic renaissance in order to reinforce their own nationalism. However, in view of the activities of Islamic extremists in Afghanistan, the part played by the Islamic Renaissance Party within anti-establishment factions during the civil war in Tajikistan, and the radical Islamic activities historically witnessed in the Fergana Valley in Uzbekistan, the countries of Central Asia have been very wary of Islamic renaissance escalating into anti-government movements. In terms of institutional setup, each country has maintained the separation of religion and politics that was established during the Soviet era, however, the emergence of Islamic renaissance is posing increasingly challenging issues. Furthermore, moves towards Islamic renaissance are becoming increasingly stronger in each country, and younger members of the elite classes are showing a growing affinity for Islamic values. However, it should also be recognized that such developments will not immediately lead to the emergence of extreme radicalism.

## - Social Development Situation

Looking at conditions of social development based on the human development index, each of the five Central Asian countries is classed as a middle developed nation. Average life expectancy at birth is around 65 years, however, as of 2003 life expectancy had deteriorated compared to the situation before independence. Looking at public expenditure in the health sector in 1995 and 2002, the amount had declined in all countries except for Turkmenistan. All the countries in Central Asia are confronted with the following problems: 1) Crisis of elementary and secondary education, 2) Crisis of higher education, and 3) Increasingly large language barriers.

## 1-3 Transitions and Current Conditions in International Relations <br> - Central Asia Region

Russia is most worried about the growing influence of specific external forces, in particular the United States, in the Central Asian region, and it has historically held the deepest strategic interest in this area. On the other hand, the United States is interested in extending its influence here in order to augment its global strategy. China's interests lie in, 1) developing Central Asia as a supply base for petroleum and gas resources and ferric, non-ferric and rare metals, 2) developing overland transportation routes, and 3) preventing the region from becoming a base for activities by Uyghur separatists.

Iran is striving to extend its influence in Central Asia through Tajikistan, with which it has profound cultural links, while taking care not to arouse religious sensitivities in the region. As is evidenced by its observer participation in the Shanghai Cooperation Organization, one aspect

[^0]of Iranian policy in Central Asia is to avoid falling into international isolation.

Concerning relations with South Asia, following the declaration of independence by the Central Asian republics, Pakistan, in its rivalry with India, has strived to make overtures to the republics through emphasizing its religious and cultural similarities as a Muslim state. Central Asia also represents an appealing supply base of gas and petroleum resources. However, due to their ingrained secular traditions, the Central Asian countries hold a stronger affinity towards India and are wary of Pakistan after seeing how it supported the Taliban. As a result, Pakistan's efforts to approach the Central Asian republics have not produced the anticipated results.

Furthermore, in terms of relations with the United States, Central Asia is assuming increasingly special importance in relation to the Afghanistan issue following the start of the Obama administration in January 2009. In view of the growing instability being witnessed in Pakistan, the geopolitical importance of Central Asia is growing as an alternative supply route for military and non-military supplies. Needless to say, Tajikistan, Uzbekistan and Turkmenistan are important because they share borders with the northern part of Afghanistan, however, attention is also being directed towards the need for cooperation with Kyrgyz Republic, Kazakhstan and Russia.

## - Relations between Central Asia and Afghanistan

Central Asia has historically had a profound relationship with Afghanistan. The northern part of Afghanistan is known as South Turkistan and, together with West Turkistan in the present Central Asia and East Turkistan which forms the present Xinjiang Uyghur Autonomous Region of China, this whole region constitutes Turkistan in the broad sense and still retains strong cultural and ethnic commonality. However, although Central Asia plays an important role in the issue of Afghanistan when viewed in geopolitical terms, concrete relations are presently extremely limited.

## - Turkmenistan

Turkmenistan declared itself a neutral country and was recognized as a permanently neutral state by the United Nations in 1995, and since then it has pursued a unique diplomatic policy based on neutrality. For Turkmenistan, the most pressing diplomatic issue concerns price negotiations with Russia over exported gas. The securing of routes for pipelines geared to bolstering bargaining power with Russia and diversifying gas export destinations is also an important item. Plans for the export of gas to China through a pipeline are particularly noteworthy, and Turkmenistan reached an official agreement with China on this project in 2007.

## - Kyrgyz Republic

Kyrgyz Republic recognizes itself to be a minor nation and has until now adopted an omnidirectional diplomatic policy. It has so far permitted both the United States and Russia to establish military bases on its territory, however, a change has come over this policy since the start of 2009. Specifically, Kyrgyz Republic has announced its intention to close down a U.S. air force base within its borders, while at the same time Russia, which aims to reestablish its influence in the former Soviet sphere, has announced plans to implement an aid program worth US\$2 billion.

## - Tajikistan

Tajikistan's diplomatic relations are omnidirectional and embrace both the United States and Russia, and they are also characterized by links with the Islamic world, most notably Iran. When the Soviet Union invaded Afghanistan, Tajik nationals were mobilized to fill important posts on the border, whereas Afghanis were offered education opportunities in Tajikistan. Against such a background, Tajikistan has especially strong ties with Afghanistan within Central

Asia. Moreover, following the declaration of independence, conditions developed for the promotion of exchange with Iran based on cultural and linguistic commonality.

Furthermore, Tajikistan is home to military installations of the Collective Security Treaty Organization (CSTO) of the CIS, and Russian garrisons are stationed there. In view of this background, Tajikistan's border with Afghanistan is not regarded as merely a single country border but rather the border of the CIS including Russia.

## 2. Regional Cooperation Organization in Central Asia

## 2-1 Development of the Key Regional Cooperation Organizations in Central Asia

Following collapse of the Soviet Union, many of the countries of Central Asia, realizing the need for intraregional cooperation in order to promote domestic economic development, established various intraregional cooperation organizations. Starting from the Commonwealth of Independent States (CIS), which was announced by President Yeltsin of Russia together with the dissolution of the Soviet Union on December 18, 1991, the countries of Central Asia joined the Economic Cooperation Organization (ECO) of Iran, Pakistan and Turkey in 1992. Important regional cooperation organizations were subsequently established in the shape of the Central Asia Regional Cooperation organization (CAREC) in 1997, the Eurasian Economic Community (EAEC) in 2000 and the Shanghai Cooperation Organization (SCO) in 2001. Of these, the only organization that is participated in by all five Central Asian countries is the ECO. Turkmenistan is currently looking into the possibility of participation in the CAREC.

## 2-2 Impacts and Future Direction of Regional Cooperation Organizations in Central Asia

Depending on the purpose of establishment, the focus and influence of each regional cooperation organization in the Central Asia region overall vary. Russia is currently striving to expand its influence on the back of the current global economic crisis within the framework of the EAEC. Belarus, Kazakhstan, Kyrgyz Republic and Tajikistan are either already receiving economic aid from Russia or are moving in this direction. Moving beyond the framework of the EAEC, Russian assistance is also targeting Armenia, Mongolia and even Ukraine (conditional on certain policies), and it is also extending to Iceland outside of the former Soviet sphere of influence. Uzbekistan was notified of its disqualification as a member of the EAEC in October 2008, and it is unclear whether or not Russia will make it a target for support. In any case, the said developments strongly reflect Russian security needs.

Possibilities regarding cooperation in the fields of transport and telecommunications networks, resources and energy have been explored within the SCO and ECO. In particular, interest is directed towards the construction and/or improvement of transport and telecommunications networks linking the north and south of the Eurasian Continent. Moreover, with a view to enhancing the prospects for this project, interest is being directed towards Afghanistan because of its relevance in terms of security and physical distribution routes.

## - Turkmenistan

Turkmenistan is the only country in Central Asia that is neither a member of the EAEC nor the SCO. However, President Berdymukhamedov has attended SCO conferences as a guest since 2007, and he also attended summit meetings of the ECO as a member nation in 1992 and as an associate member nation from 2009. The central feature of cooperation between Turkmenistan and the ECO concerns the construction of transport and telecommunications networks.

At the ECO summit meeting of Caspian leaders in October 2007, the presidents of Turkmenistan and Kazakhstan announced a joint declaration concerning the construction of a railway connecting Uzen in Kazakhstan to Gorgan in Iran and passing through

Kyzylkaya-Bereket-Etrek in Turkmenistan, as an important component in the north-south transport and telecommunications corridor. For Turkmenistan, the north-south transport network is of interest from the viewpoint of diversifying gas export routes. Turkmenistan's consistent aid for economic and social development in Afghanistan is viewed as part of the ECO effort to stabilize that country.

## - Kyrgyz Republic

Although Kyrgyz Republic is a member of the EAEC, it has not yet signed the customs union created by Russia, Belarus and Kazakhstan.

## - Tajikistan

Like Kyrgyz Republic, Tajikistan has not yet signed to the customs union of the EAEC. However, it is utilizing forums of the SCO and ECO to seek a breakthrough in the current financial and economic crisis. Tajikistan also values its links with Iran via the ECO. Furthermore, when President Ahmadinejad of Iran called for the creation of a unified ECO currency, establishment of an ECO Bank and abolition of regional tariffs, Tajikistan declared its approval for creation of the ECO Bank.

## 2-3 Regional Cooperation Projects and Programs by Regional Cooperation Organizations

-Regional Cooperation Projects and Programs
Looking at the intraregional cooperation projects and programs of the EAEC, SCO, ECO and CAREC, there are numerous areas of redundancy even on the grand design level. In terms of the scope covered by these regional cooperation organizations, the transport and energy sector, which is highly important in relations with Central Asia overall as well as China, Russia and South Asia including Afghanistan, is treated as a priority issue within the frameworks of the SCO, ECO, CACO and CAREC. As for trade, this is raised within the frameworks of the SCO, ECO and CAREC. The environment is targeted by the SCO and ECO; tariffs are targeted by the CAREC and EAEC; and civil security is addressed by the SCO and CSTO. However, activities are underpinned by finance plans having the ADB and other international agencies as donors and, apart from the CAREC in which specific projects are clearly defined within programs, concrete projects are planned and implemented only in limited cases.

Looking at the situation in each country, in Turkmenistan, projects for human resources development are being implemented, for example, a CAREC project of technical cooperation for environmental NGOs and so on. In Kyrgyz Republic, a project for connecting Bishkek with Kashgar in the Xinjiang Uyghur Autonomous Region of China is being advanced as part of the CAREC strategy for promoting transport and trade. This is being conducted under support from the ADB with the objective of lowering transport costs and promoting trade and tourism between Kyrgyz Republic and China. In Tajikistan too, a CAREC project aimed at rehabilitating the road between Dushanbe and the Uzbekistan border is being advanced under ADB support.

## - Assistances to Afghanistan by Regional Cooperation Organizations

The regional cooperation organizations in Central Asia all have clearly defined policies for providing support to Afghanistan.

The SCO attracted attention when it invited President Karzai of Afghanistan to the summit meeting held in Bishkek in August 2007. Moreover, the SCO special international conference on the Afghanistan problem was staged in Moscow in March 2009, and this was attended by representatives of member states and observers from 30 international organizations and countries such as the United States, United Nations, EU, NATO, and CIS. It is thought that this was designed to maintain the SCO's right to speak concerning problems in Afghanistan,
however, it appears that the member nations did not come to any agreements regarding concrete dealings with that country.

Afghanistan is also a member of the ECO, another organization which adopts a positive approach to the reconstruction of Afghanistan in view of its geopolitical importance pertaining to ECO members, most notably in relation in developing a north-south corridor through the Eurasian Continent.

Concerning links with the CAREC, Afghanistan is a member of the ADB, which is an important donor for that organization. CAREC support for Afghanistan is directed towards the construction of policies and institutions and provision of necessary infrastructure for state reconstruction. Grants amounting to more than US $\$ 200$ million have already been provided between 2005 and 2008 for four projects targeting roads, electric power and improvements to public utility capacity.

## 2-4 Roles and Policies of Donors in Regional Cooperation Organizations

The most important bilateral donors in Central Asia are the United States, Germany, Switzerland, Turkey, Japan, China and Russia, and so on, while the primary multilateral donors include the WB, ADB, EC and EBRD, and so forth. There are no official documents which show the policies of these donors and the role they play regarding regional cooperation organizations in Central Asia. In particular, bilateral donors each conduct support for Central Asia countries according to their own specific agendas, and the relative weight of support for each country is large. For CAREC which is primarily aiming at infrastructure development in the region, ADB, WB, IFC, EBRD and IsDB offer their supports. Apart from this case, however, since most other regional cooperation organizations have been established based on political and military agendas, they have muted contacts with donor support, not entering into direct cooperation with donors.

Moreover, China and Russia have joined and play a central role in the regional cooperation organizations of Central Asia in view of their geographical and historical background, and they implement support according to their respective areas of benefit and interest. China takes involvement in Central Asia via the SCO and CAREC with a view to ensuring stabilization and security, securing energy, diversifying supply sources, and expanding markets in the western part of the region. Moreover, as a member of the CAREC, China supports road construction and so on, while it is strengthening its political, military and economic influence in Central Asia via the SCO. As for Russia, its diplomatic stance regarding Central Asia has been dominated by the desire to establish superpower status through reasserting its presence in the former Soviet sphere ever since the start of the Putin administration. Russia's desire to utilize regional cooperation in Central Asia is underpinned by a complex political, economic and military agenda. Russia aims not only to conduct economic cooperation via the EAEC, but in future it hopes to realize integration with the CSTO. Russia is also seeking to expand its military and economic influence via the SCO, and its membership in the SCO is significant from the viewpoints of stabilizing border regions with Central Asia, developing economically backward regions such as the Far East and Siberia, and gaining access to Asian markets. From the viewpoint of the countries of Central Asia, Russian membership in the SCO is meaningful in terms of checking the growing influence of China and providing a counterbalance in the region.

## 1 Regional Economy in Central Asia

## 1-1 Transition Process to a Market Economy

## 1-1.1 Economic Liberalization and Privatization

After the collapse of the Soviet Union and their independence in 1991, each of the respective in Central Asia has implemented economic reform. Policy, specific measures and progress, however, are different in many senses in each country.

The current account convertibility stipulated in Article VIII of the International Monetary Fund (IMF) Agreement is restricted under the control of the government in Turkmenistan and Uzbekistan, while it is fully complied to in Kyrgyz, Tajikistan, and Kazakhstan. In the case of Tajikistan, the government reported false figures to the IMF in 2007 and 2008, and thus it was monitored by the IMF until March 31, 2009.

Restrictions on direct investment are not stipulated institutionally in Kyrgyz, Tajikistan, and Turkmenistan, but are established in Kazakhstan and Uzbekistan. In terms of the progress of liberalization on other items such as the interest rate and exchange rate, Kyrgyz is the most advanced in terms of the liberalization indicator, followed by Kazakhstan and Tajikistan. Turkmenistan and Uzbekistan show the lowest indicators.

In Kyrgyz and Tajikistan, however, profitable investment areas are limited, and also there is a high economic risk. Although there is a strong interest on the part of foreign companies in the natural gas and petroleum sector, investment in this sector is in fact difficult. On the other hand, in Kazakhstan, in spite of existing regulations, foreign direct investment has been implemented actively. This has made it the largest foreign investment in Central Asia.

Table 1-1 Economic Liberalization and Privatization

| Item | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Current account convertibility | Full | Full ${ }^{1}$ | Limited | Full | Limited de facto |
| b. Controls on inward direct investment | No <br> (All investments must be registered with the Ministry of Justice and statistical agencies) | No <br> (Approval from the National Bank of Tajikistan is required) | No <br> (Investors are required to register with the State Service for Foreign Investments) | Yes | Yes |
| c. Interest rate liberalization | Full | Full | Limited de jure | Full | Limited de jure |
| d. Exchange rate regime | Managed float | Conventional Peg | Fixed* ${ }^{2}$ | de facto pegged to US dollar | Crawling peg |
| e. Wage regulation | No | No | Yes | No | Yes |
| f. Trade-ability of land | Full except foreigners | Limited de facto | Limited de jure | Full except foreigners | Limited de jure |
| EBRD Index of Liberalization (2008) |  |  |  |  |  |
| Price | 4.3 | 3.7 | 2.7 | 4.0 | 2.7 |
| Foreign Exchange Rate and Trade | 4.3 | 3.3 | 2.0 | 3.7 | 2.0 |
| Competition Policy | 2.0 | 1.7 | 1.0 | 2.0 | 1.7 |

[^1]Note1: Judgment basis for each item is as follows;
a. Compliance with regulations of Article VIII of IMF Agreement : (1) Mitigation of restrictions on payments or transfers for current account transactions (2) Mitigation of differential treatment of currency, (3)Sustainment of convertibility of local currency outstanding possessed by other country
b. Control on property rights, investment conditions and restrictions on foreign capital
c. Legal and institutional regulations, bank deposits, lending interest rate and de facto constraints (by liquidity in financial market and others )
d. Floating, pegged to euro or US dollars, crawling peg, and others
e. Restrictions or taxes on enterprises to adjust the average wage
f. Legal and institutional regulations or de fact (by function of land market and others) restrictions on trade-ability of land rights
Note2: Turkmenistan has undertaken a reform of the exchange rate system after 2008, in order to resolve the double exchange rate, with remarkable disparity between official and parallel rates. The exchange rate was unified in May in 2008 and denomination was implemented in January in 2009.

Table 1-2 Business Environment

| Items | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :--- | :---: | :---: | :---: | :---: | :---: |
| a. Competition <br> Office | Yes | Yes | No | Yes | Yes |
| b. Secured <br> transactions <br> law | Modern/some <br> defects | Inefficient | Malfunctioning | Some defects | Malfunctioning |
| c. Quality of <br> corporate <br> governance <br> law | Medium | Very low | Low | Medium | Medium |

Source: EBRD, "Transition Report 2008", Country Assessments
Note: Judgment basis for each item is as follows;
a. Independent competition or existence of anti-monopoly office
b. Assessment on the level of reform in relation to the EBRD Model Law on secured transactions and the EBRD 10 core principles of secured transactions laws
c. Level of compliance of corporate governance laws with international standards (such as OECD Principles of corporate governance)

In the overview of the position of private sector in each country (Table 1-2), Kyrgyz has the largest share of private sector to GDP and employment sector. Its private sector share in GDP was $75 \%$ as of the year 2007 and the same share in employment was beyond $80 \%$ in 2005. Privatization revenue was, however, $7.6 \%$ while progress has been relatively small in the privatization of large-scale national enterprises.

Next to Kyrgyz, Kazakhstan has the second largest share of the private sector in the economy. In 2007, the private sector share in GDP was $70 \%$ and the same for employment was $78 \%$. Kazakhstan has the largest share of privatization revenue among the 5 countries in Central Asia, with a level of more than $30 \%$. It has also the largest foreign investment and the most developed position in privatization. Hence, Kazakhstan is the country where the private sector undertakes practical economic activity at the largest-scale in Central Asia.

Tajikistan is has a private sector share in GDP and employment of more than $50 \%$. However, privatization of national enterprises is still at a medium level and the privatization revenue share
in GDP $7.9 \%$ as of 2007. As for Uzbekistan, the position of the private sector in the economy is limited and its share in GDP is still $45 \%$.

Turkmenistan is the country that has the least share of the private sector in the economy in Central Asia. Private sector share in GDP was only $25 \%$ as of 2007.

Table 1-3 Position of Private Sector in the Economy (Year 2003 and 2007)
(Unit: \%)

| Item | Kyrgyz * | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Private sector <br> share in GDP | 65.0 | 50.0 | 25.0 | 65.0 | 45.0 |
| Private sector <br> share in <br> employment | 75.0 | 55.0 | 25.0 | 70.0 | 45.0 |
| Privatization <br> revenue in GDP | 80.2 | 45.8 | n.a. | 75.4 | n.a. |

Source: EBRD, "Transition Report 2008", Country Assessments
Note1: The upper level figure is for year 2003 and the lower level one is for year 2007.
Note2: *Private sector share in GDP of Kyrgyz is for the year 2005

Examining the results of large-scale privatization with transaction amounts of more than 1 million dollars since 2000, Kazakhstan has the largest figure in terms of amount and number. In Kazakhstan, twelve privatizations with an amount of more than 3 billion US dollars were implemented during the years $2000 \sim 2006$. Privatization has been implemented in areas that are predictable for large-scale foreign direct investment, such as infrastructure, energy, and resources. In particular, it was noteworthy that the stock of Kazakhstan "Kaz Munai Gas Exploitation Production(AO) , a subsidiary of the largest national enterprise "Kaz Munai Gas", which develops and produces terrestrial oil fields and gas fields, was listed in the Kazakhstan and London stock exchanges. The Kazakhstan government gained a sales amount of up to 2.3 billion US dollars by the public stock offering.

Uzbekistan also implemented the privatization with a total amount of 46 million US dollars for of 9 projects during $2000 \sim 2006$. Nevertheless, large-scale privatization was undertaken primarily in manufacturing industries such as for construction materials and food, and unlike Kazakhstan, it has not yet progressed to national enterprises related to resources.

Large-scale privatization in Tajikistan and Kyrgyz is very limited, with one or two project each. Moreover, it has not been implemented in Turkmenistan.

Table 1-4 Result of Privatization of Large-scale Enterprises in Central Asia (2000-2006)

| Name | Sector | Year | Transaction Amount <br> (Million US \$) |
| :--- | :--- | :---: | ---: |
| Kazakhstan | Infrastructure <br> (Electric Power) | 2000 | 300 |
| Ekibastuz Power Station 2 | Mining | 2001 | 63 |
| Kazakmys | Infrastructure | 2001 | 4 |
| Sary-Arika Airport |  |  |  |


| Name | Sector | Year | Transaction Amount (Million US \$) |
| :---: | :---: | :---: | :---: |
|  | (Aviation) |  |  |
| Halyk Savinfs Bank | Finance | 2001 | 41 |
| SNPS-Aktobemunaigaz | Energy (Gas) | 2003 | 150 |
| Kazahkhstan Aluminum | Mining | 2003 | 22 |
| Kazahkhstan Aluminum | Mining | 2003 | 21 |
| Kaztshink | Mining (Zinc $\cdot$ Lead) | 2005 | 111 |
| Kondensat | Petroleum condensate | 2005 | 10 |
| Vasilkovoskoye Zoloto | Mining (Gold) | 2005 | 11 |
| Vasilkovoskoye Zoloto | Mining (Gold) | 2005 | 6 |
| Kaz Munai Gas | Energy | 2006 | 2,300 |
| Tajikistan |  |  |  |
| JSC ZHBK \& CD | Industry | 2005 | 1 |
| Kyrgyz |  |  |  |
| Naryngidoroenrgostroi | Hydro power related construction | 2005 | - |
| Kadamzhaiskii Sur'myanyi Kombinat | Antimony manufacturing | 2005 | 2 |
| Uzbekistan |  |  |  |
| Uzkabel | Cable production | 2002 | 8 |
| Dorreftrans | Transport | 2002 | 12 |
| Yangiyol Yog-Moy JSC | Food | 2003 | 1 |
| Urgench Yog JSC | Food | 2003 | 3 |
| Toshmargyog JSC | Food | 2003 | 2 |
| Uzkabel | Cable production | 2004 | 10 |
| AO Akhangaran Tsement | Construction materials | 2005 | 7 |
| AO Bukhara Gips | Construction materials | 2005 | 2 |
| AO Samarkandskii Liftostoritel'nyi Zavod | Industrial equipment | 2005 | 1 |

Source: World Bank Web site: Privatization Database (http:// rru.worldbank.org/privatization/) as of May. 2009
Note: Privatized enterprises with transaction amounts of more than one million US dollars only.

## - Turkmenistan

In Turkmenistan, according to an announcement by the President in February, 2008, private sector share in the non-natural gas and petroleum sector was envisaged to expand to $70 \%$. The position of the private sector, however, has not necessarily been high in the government agenda. In respect of the expansion of the private sector, importance has been placed on the privatization of medium and small-scale national enterprises and the development of existing private enterprises.

As a policy to promote private investment, the government carried out the protection of private property rights, the establishment of new laws and the reform of legal institutions in relation to foreign investment, and tax reform. Nonetheless, the business environment is still difficult for private enterprises. According to the Japanese companies investing in Turkmenistan, those
companies having invested during the President Niyazov are doing business; however, it is difficult for new investors to start business in the country.

## - Kyrgyz

Kyrgyz, called as "excellent student" of the WB and the IMF, has docilely obeyed the market economy programs of international financial institutions, promoting the policy of "progressive reform" since its independence in May 1993. Kyrgyz introduced a local currency (som) earlier than any other country in Central Asia and came out of the ruble, the currency market of the former Soviet Union. In addition, as seen in the fact that they participated in the World Trade Organization (WTO) in December 1998, earlier than other CIS countries, they have implemented reform in the market economy before other countries in Central Asia. Considering that other countries, including Kazakhstan, are in the middle of negotiating to be WTO members, it is evident that the opening-market policy of Kyrgyz was implemented at a very early time. As background for this, having a population of 5 million with very limited scale of economy, Kyrgyz apparently deemed it important for the stabilization and development of its economy to establish favorable relationships with international financial institutions and to promote a market economy.

As for privatization, in July 2008, upon the privatization of governmental assets included in the governmental privatization program, the government established a law to implement privatization without the approval of the nation. This resulted in the promotion of the privatization of large-scale national enterprises, including a rural electric power distribution company, Kyrgyz Air (aviation), Krgyzaltyn (a gold mining and refining company), KyrgyzGaz (gas supply).

The Kyrgyz government introduced various policies to improve the business environment such as establishing a "One-Stop-Shop" for the registration of enterprises in May 2008. Therefore, Kyrgyz was ranked as one of three countries where reform was most advanced as of the year 2007 according to the World Bank (WB) "Doing Business Survey".

## - Tajikistan

Tajikistan planed the privatization of 459 medium and small-scale national companies in the Strategic Plan (2007-2009). Of these, 30 companies have already gone bankrupt. As of 2007, the private sector share in GDP had expanded to $55 \%$ and the same share in employment was more than 50\%. According to the Tajikistan Economic Development and Trade Ministry, the registration number of medium and small- scale companies is up to 6,300, approximately, with 180 thousand employees.

However, the privatization of 16 large-scale national companies, including the national prime industries such as the Tajik Aluminum Company (TALCO), Barki Tojik (Electric Power), Tajikistan Railway (Railway), and others, have not been undertaken, and thus the Tajikistan economic structure has not yet shifted fundamentally. According to Tajikistan's Committee on Investments and State Property, restructuring ${ }^{1}$ is planned for Tajik Air (Aviation) and Tajik Teleradio (broadcasting), and Tajik Air will be divided into 6 companies during 2012 to 2016.

In particular, in the agriculture sector, including cotton manufacturing, although the involvement of the government is still large, it remains inefficient and with low productivity. Therefore, the reform has been required amid an increasing negative impact on the macro economy. In order

[^2]to resolve the accumulated debt problem of cotton farms, a presidential decree was signed. However, as for executing the land user's right for complete transfer and "freedom of agriculture" (the right for farmers to select agricultural products), implementation has stagnated and not progressed.

A control office for private investment was established in 2007 and has conducted investment promotion, support for entrepreneurs, and improvement of the business environment. At the same time, it has coordinated and monitored foreign assistance.

## 1-1.2 Public Service Reform

Progress in public service reform in Central Asia is basically gradual. In respect of the electric power sector, the independence of electricity regulators has been partially assured in Kyrgyz and Kazakhstan, but there is no independence in other countries.

In terms of the separation of railway infrastructure, this has been fully realized in Kazakhstan and only partially realized in Uzbekistan. In the other three countries, the railway infrastructure is not separated.

As for the road directorate, there is no organization that has institutional, financial, managerial and decision making independence in any of the countries.

The level of compliance of concession laws with international standards, according to the EBRD assessment, is medium in Kazakhstan, low in Kyrgyz, Turkmenistan, Uzbekistan, and very low in Tajikistan.

Table 1-5 Reform of the Public Service Sector

| Item | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Independence <br> of the electricity <br> regulator | Partial | No | No | Partial | No |
| b. Separation of <br> the railway <br> infrastructure <br> from operation | No | No | No | Full | Partial |
| c. Independence of <br> the road <br> directorate | No | No | No | No | No |
| d. Quality of <br> concession laws | Low | Very low | Low | Medium | Low |

Source: EBRD, "Transition Report 2008", Country Assessments
Note: Judgment basis for each item is as follows:
a. Institutional, financial, managerial and decision making independence and existence of a regulator with institutional independence
b. Institutional separation
c. Existence of a road management agency that is separate from the government, with institutional, financial, managerial and decision making independence
d. Level of compliance of concession laws with international standards.

## 1-1.2.1 Power Sector

Kazakhstan is the most advanced in reform of the electric power sector. During the 1990's, separation of the power generation, transmission, and distribution sectors was implemented and power plants were privatized in Kazakhstan. Regarding transmission, the company was corporatized under a share hold by the government and distribution was implemented by a state-owned enterprise. The distribution company installed meters and introduced a meter-rate system for energy charge. The level of the electricity tariff was raised almost to cost recovery level, the highest among the 5 countries in Central Asia.

Kyrgyz, Tajikistan, and Uzbekistan also raised electricity tariffs due to the increase in energy prices. On the other hand, in Turkmenistan, residential power supply is free up to a certain level of use.

Table 1-6 Power Sector Reform (Year 2003 and 2007)

| Item | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :--- | :---: | :---: | :---: | :---: | :---: |
| EBRD Reform <br> Index | 2.3 | 1.0 | 1.0 | 3.0 | 2.0 |
| Residential <br> Electricity Tariff <br> (per $\mathbf{1 ~ k W h ) ~}$ | 2.3 | 2.0 | 1.0 | 3.3 | 2.3 |
| Average collection <br> rate | $48 \%$ | 7.7 cent | 0.6 cent | n.a. | 4.9 cent |

Source: EBRD, "Transition Report 2008", Country Assessments
Note 1: The upper level figure is for year 2003 and the lower level one is for year 2007.
Note 2: Average collection rate for Turkmenistan and Kazakhstan in the upper row shows data for the year 2002.
Note 3: Average collection rate for Uzbekistan in the lower row shows data for the year 2006

## Turkmenistan

Power supply is under the Ministry of Energy and Industry. On the electricity tariff, up to 35 kW for one person per month is fee of charge. If over 35 kW is used, 46 old Turkmen manats ( 0.0023 new manats, approximately 0.069 yen) is charged.

## - Kyrgyz

Kyrgyz started electric power sector reform earlier than other countries and implemented a separation of the generation, transmission and distribution sectors in the state-owned enterprise "Kyrgyzenergo" in the year 2001. At present, Kyrgyzenergo has become a joint stock company (JSC), however, the government holds the major share of stock.

In May 2008, the Kyrgyz government decided to raise the electricity and heating tariff ${ }^{2}$ from June 2008. The residential electricity tariff was raised by $32 \sim 53 \%$, that is, $1.7 \mathrm{cent} / \mathrm{kWh}$ in 2007 was increased to $2.3-2.6$ cent $/ \mathrm{kWh}$. This implies that the level for covering administration costs - 2.8 cent $/ \mathrm{kWh}$ - has almost been attained. The collection rate is, however, very low - 72\% of the total is unpaid, and the amount of uncollected payment has

[^3]increased to3.3 billion soms.
In addition, the company has suffered from problems such as obsolete facilities, inappropriate and non-transparent management and so on, Profit, therefore, in the power sector was very low and the deficit amount rose to 2.4 billion soms.

## - Tajikistan

In Tajikistan, the state-owned enterprise "Barki Tojik" manages power generation, transmission and distribution. The electric power supply in Tajikistan is very limited and has been into power crisis. Although electricity is generated by hydro power through the affluent water resources in Tajikistan, most of it is utilized for aluminum production and export and the general power supply depends on the import of electricity from Uzbekistan and Turkmenistan and generation by natural gas imported by Uzbekistan. Due to this fact, and coupled with the energy price escalation in recent years, the electricity tariff has been raised. From the year 2008, a gradual increase in the price has been implemented by $45 \%$ on the average, with a doubled or tripled price escalation depending on each region. The residential electricity tariff was 0.6 cent $/ \mathrm{kWh}$ in 2007, and there is a policy to increase it to 2.5 cent $/ \mathrm{kWh}$ by year 2010.

On the other hand, the electricity tariff and so on is not transparent in the power supply by Barki Tojik to TALCO, which is the largest power consumer. Moreover, the uncollected balance to TALCO has been pointed out as a factor putting pressure on the management ${ }^{3}$. This issue is predicted to improve since the agreement with the WB was signed. This states a phased adjustment of the electricity tariff to a cost recovery level for Barik Tojik by the year 2010.

## 1-1.2.2 Transport Sector

For railways, reform was advanced in Kazakhstan and Uzbekistan, and progress has been made in improving and strengthening railway infrastructure with assistance from the donors. Particularly, in Kazakhstan railway labor productivity has greatly improved. With a productivity standard set as 100 in year 1989, it was 83.6 in the year 2007. In Kyrgyz, Tajikistan, and Turkmenistan, railway sector reform has not been advanced, in particular in Kyrgyz, where railway labor productivity is the lowest at 29.7 as of the year 2007.

Table 1-7 Transport Sector Reform (Year 2003 and 2007)

| Item | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :--- | :---: | :---: | :---: | :---: | :---: |
| EBRD Index of <br> reform <br> (Railway) | 1.0 | 1.0 | 1.0 | 2.7 | 2.7 |
| EBRD Index of <br> reform <br> (Road) | 1.0 | 1.0 | 1.0 | 3.0 | 2.7 |
| Railway labor <br> productivity <br> $(\mathbf{1 9 8 9 = 1 0 0})$ | 1.7 | 1.0 | 1.0 | 2.0 | 1.0 |

Source: EBRD, "Transition Report 2008", Country Assessments
Note 1: The upper level figure is for year 2003 and the lower level one is for year 2007
Note 2: Railway labor productivity is calculated by transport volume (passenger kilometers and ton kilometers) as percent of total employment by the railway sector
Note 3: Railway labor productivity for Tajikistan is based on 1994=100

[^4]
## 1-1.2.3 Water Sector

Regarding the water sector, no country has made much progress in reform. During the Soviet era, public services of water, electricity, gas, heating were supplied at a fixed rate charge and this has been sustained for the water sector since independence. In each country, a meter-rate charge has been gradually introduced and a rise in the tariff is planned. However, water is a public service which is indispensable to the nation's life and consideration for people of low-income is required. It is thus difficult to increase the tariff to a large extent.

Table 1-8 Sector Reform for Water Supply and Sanitation

| Item | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :--- | :---: | :---: | :---: | :---: | :---: |
| EBRD Index of <br> reform | 1.7 | 1.0 | 1.0 | 1.7 | 1.7 |

Source: EBRD, "Transition Report 2008", Country Assessments
Note: The upper level shows data for the year 2003 and the lower shows data for the year 2007.

## - Turkmenistan

The Turkmenistan government provides a subsidy for the water supply, basically making it free of charge.

- Kyrgyz

Kyrgyz conducts the water sector reform with the assistance of donors such as the WB, DfID, and USAID.

A local public service entity called "Vodakanals" administrates and manages the water supply and sanitation service in urban areas. On the other hand, Kysgyz Ayil Suu (a rural water supply entity) has provided the water supply service in rural areas since the Soviet era. This entity was dissolved due to financial difficulties and became the Department of Rural Water Supply (DRWS) in the Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI). In December 2008, DRWS was transferred to the National Agency of Local Self-Governance Affairs (NALSG) from MAWRPI and provides water supply services in rural areas under close cooperation with rural local authorities called "Ayil Okmotu (AO)".

As of 2007, water charges in urban areas are very low: 22.53 som for one person per month for a cold water supply. This price is not at a cost recovery level, and thus the local authorities in urban areas cannot invest in or improve the facilities sufficiently due to financial difficulties. In rural areas, there is a lack of financial and human resources necessary to expand and implement a sustainable water supply, hence, it is said that the service has become worse compared to the situation before independence.

## Tajikistan

The water supply system is different in rural and urban areas.
The water tariff system has been shifted from the existing fixed-rate to a meter-rate charge, and the Ministry of Land Improvement \& Water Economy applies the water charge system with the approval of the Ministry of Economy \& Trade. In rural areas, although there are differences
depending on conditions, the charge is in general 1.5-2.0 diram per 1 cubic meter ${ }^{4}$. In urban areas, the state-owned enterprise "Kochagii Manziliu Kommunali (KMK)" administers and provides public services, including water supply and sanitation, through 180 local subsidiaries nationwide. The Ministry of Land Improvement \& Water Economy reports that the current water tariff level cannot cover maintenance costs. In addition, meters are often not installed and thus there is a system loss estimated to be $50-60 \%$ on average. As a result, appropriate maintenance and improvements cannot be carried out due to the lack of funding, in spite of the fact that $70 \%$ of the water supply and sanitation infrastructure has deteriorated due to obsolescence and other reason.

## 1-2 Economic Relations with Surrounding Countries

## 1-2.1 International Migration and Remittance

At the time of the collapse of the Soviet Union, the 5 countries in Central Asia became independent; however, they had a large number of unemployed due to the break-up of the economic structure that had existed under Soviet socialism. In addition, there has been political instability and a large migration from Central Asia. Russia is the main destination. Migrant labor from Central Asia to Russia has continued to flow to the present and remittance from migrant laborers is an important economic resource in Kyrgyz and Tajikistan. However, the World Economic Crisis in the year 2008 had a serious economic influence on the Russian economy, and many migrant laborers from Central Asia have lost their jobs. The remittance amount from migrant laborers has consequently rapidly decreased.


Source: World Bank website (http://web.worldbank.org/) "Topics in Development: Migration and Remittance" (As of April in 2009)

Figure 1-1 International Migration in Eastern Europe and the Former Soviet Union

[^5]The country which has experienced the largest international migration is Kazakhstan, with 3.7 million people as of the year 2005, which accounts for $25 \%$ of the population. The destinations of many migrations are the Ukraine and Uzbekistan as well as Russia, and also Germany, Greece and the USA. On the other hand, there are also many immigrants in Kazakhstan, more than 2.5 million as of the year 2005.

Next to Kazakhstan, Uzbekistan has many international migrants, with over 1.2 million immigrants against over 2.1 million emigrants. Turkmenistan has the lowest number, with, 260 thousand emigrants and 220 thousand immigrants.

In Kyrgyz and Kazakhstan, emigrants greatly exceed immigrants, the stock of emigrants being double that of immigrants in both countries. Kyrgyz has 610 thousand emigrants against 280 thousand immigrants while Tajikistan has 790 thousand emigrants against 300 thousand immigrants. According to the WB report ${ }^{5}$ the majority of emigrants from both countries, more than $70 \%$ of the total, stay for a short period and then return to their country.

Table 1-9 Overview of International Migration Flow in Central Asia

| Item <br> Country Overview | $\begin{gathered} \text { Kyrgyz } \\ \text { (As of 2006) } \end{gathered}$ | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Population (million) | 5 | 7 | 5 | 15 | 27 |
| Labor Force (million) | 2 | 2 | 2 | 8 | 12 |
| Urban population | 36\% | 24.6\% | 46.6\% | 57.6\% | 36.7\% |
| GNI per capita | 490 \$ | 390 \$ | n.a | 3,790 \$ | 610 \$ |
| Poverty head count ratio | 0.4\% | 7\% | 4.7\% | 0.9\% | 0\% |
| Emigration (As of 2005) |  |  |  |  |  |
| Stock of emigrants | 615,290 | 796,593 | 260,345 | 3,710,351 | 2,185,539 |
| Stock of emigrants as percentage of population | 11.7\% | 12.2\% | 5.4\% | 25.0\% | 8.2\% |
| Top 10 emigration countries | Russia <br> Ukraine <br> Israel <br> Germany <br> Tajikistan <br> Kazakhstan <br> Latvia <br> USA <br> Turkey <br> Canada | Russia Uzbekistan Ukraine Israel Kazakhstan Kyrgyz Latvia USA Germany Lithuania | Russia <br> Ukraine <br> Israel <br> Latvia <br> Turkey <br> Germany <br> Armenia <br> USA <br> Kazakhstan <br> Iran | Russia <br> Ukraine <br> Uzbekistan <br> Israel <br> Germany <br> Greece <br> Turkmenistan <br> Latvia <br> USA <br> Kyrgyz | Russia <br> Ukraine <br> Tajikistan <br> Kazakhstan <br> Kyrgyz <br> Turkmenistan <br> Israel <br> Latvia <br> USA <br> Germany |
| Immigration (As of 2005) |  |  |  |  |  |
| Stock of immigrants | 287,791 | 306,433 | 223,732 | 2,501,779 | 1,267,839 |
| Stock of immigrants as percentage of population | 5.5\% | 4.7\% | 4.6\% | 16.9\% | 4.8\% |

[^6]| Item | Kyrgyz | Tajikistan | Turkmenistan | Kazakhstan | Uzbekistan |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Top 10 | Uzbekistan | Uzbekistan | Uzbekistan | Russia | Russia |
| immigration | Russia | Russia | Russia | Ukraine | Tajikistan |
| countries | Ukraine | Kyrgyz | Kazakhstan | Uzbekistan | Kazakhstan |
|  | Kazakhstan |  | Azerbaijan | Germany |  |
|  | Tajikistan |  | Armenia | Belarus |  |
|  | Turkey |  | Ukraine | Azerbaijan |  |
|  | Germany |  |  | Turkey |  |
|  |  |  |  | Poland |  |
|  |  |  |  | Tajikistan |  |

Source: World Bank Website (http://www.worldbank.org/prospects/migrationandremittances as of April 2009), "Migration and Remittance Factbook 2008"

Note: Poverty head count ratio is the percentage of population below the national poverty line to total population. Poverty head count ratio data is as of the year 2004.

The figures in Table 1-10 represent the officially recorded amount of remittance. The off-record remittance amount, through formal and informal channels, seems to be considerable amount. It can thus be inferred that total of international remittance surpasses the official figure.

As of 2007, Tajikistan was the country with the highest amount of oversea remittance amount, with up to 1.25 billion dollars, followed by Kyrgyz, with 73.9 million dollars. Outward remittance from Kazakhstan was over 3 billion as of the year 2006. This includes remittance of migrant laborers from Tajikistan and Kyrgyz, Kazakhstan having an important role in the economy of Tajikistan and Kyrgyz. Since the Kazakhstan economy became depressed due to the influence of the World Economic Crisis in the year 2008, migrant laborers have been forced to return to their countries and the remittance amount has decreased.

The WB report ${ }^{6}$ indicates that the majority of inward remittance is designated for rural area in both Tajikistan and Kyrgyz. According to data for the year 2002, the percentage of the rural population in Tajikistan was $73 \%$, while $69 \%$ of inward remittance was for rural areas. Also, in Kyrgyz, $79 \%$ of inward remittance was for rural areas while $65 \%$ of the total population was rural. This fact implies that migrant labors are notably from rural areas where conditions are severe in the low-income countries of Kyrgyz and Tajikistan. According to the relevant agencies in both countries interviewed during the field survey for this study, the majority of remittance has been remittance by migrant labors from low-income households in rural areas.

Table 1-10 International Remittance Flows


[^7]| Country |  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Kazakhstan | Inward remittance | 147 | 165 | 178 | 188 | 188 |
|  | Outward remittance | 802 | 1,354 | 2,000 | 3,037 | - |
| Uzbekistan | Inward remittance | n.a | n.a | n.a | n.a | n.a |
|  | Outward remittance | n.a | n.a | n.a | n.a | n.a |

Source: World Bank Web site (www.worldbank.org/prospects/migrationandremittances as of April 2009), "Migration and Remittance Factbook"
Note: Figure in year 2007 is estimation.

## - Turkmenistan

There is no data for migrant laborers and international remittance.

## - Kyrgyz

Major destinations of migrant laborers from Kyrgyz are Russia and Kazakhstan. Approximately $80 \%$ of inward remittance is from Russia and $10 \%$ is from Kazakhstan. Examining the balance of international payments in the third quarter of 2008, as announced by National Bank of the Kyrgyz Republic (NBKR), current transfer was 1,075.1 million dollars for 9 months in 2008 most of which was remittance by overseas migrant laborers.

The ADB report ${ }^{7}$ analyses that $60 \%$ of inward remittance from overseas is designated for rural areas and one household receives an average 1,331 dollar remittance for a year. This amount is nearly equivalent to half of the total household income, therefore, it is an important source of income for low-income and the poor households in rural areas. Reviewing region-wise distribution, the highest share of total remittance is held by Osh province, accounting for $38.8 \%$ of the total, followed by $18.8 \%$ in Dzhalal-Abad and $17.7 \%$, in Bishkek. Osh and Dzhalal-Abad are located in the southern area of Kyrgyz, together with Batken, and therefore, more than $65 \%$ of total remittance is concentrated in the southern area of Kyrgyz. The south of Kyrgyz has a concentration of population; however, there is also a lack of employment opportunities due to the shortage of agriculture land and closure of factories from the Soviet and it has the highest rate of poverty head count ratio in the country. Remittance by migrant laborers is therefore an important income source for households in the southern area.

Table 1-11 Overseas Remittance Distribution by Region

| Destination | Share (\%) |
| :--- | :---: |
| Osh Oblast (Region) | 38.8 |
| Bishkek | 17.7 |
| Chui Oblast | 5.6 |
| Issykkul Oblast | 0.7 |
| Naryn Oblast | 1.2 |
| Taras Oblast | 1.2 |
| Batken Oblast | 7.7 |
| Dzhalal-Abad Oblast | 18.8 |
| Osh city | 8.2 |

Source: ADB, "A Study on International Migrants' Remittances in Central Asia and South Caucasus: Country Report on Remittances of International Migrants and the Financial Sector in the Kyrgyz Republic" (Technical Assistance Consultant's Report- Draft), p.23, Figure 13

[^8]

Source: United Nations Development Programme, "National Human Development Report 2005:
The Influence of Civil Society on the Human Development Process in Kyrgyztan", (2006)
Figure 1-2 Regions in the Kyrgyz Republic

Overseas remittance plays an important role not only at household level but also in the Kyrgyz macro economic context. Although the estimated amount of overseas remittance differs because of illegal overseas remittance, the remittance amount in recent years is calculated to be up to 700 million dollars, which is beyond the amount of donor assistance and foreign investment. The remittance amount by migrant laborers in 2007 accounted for approximately 27 \% of GDP in Kyrgyz and the transfer amount in the balance of international payments from 2002 to 2006 expanded by as much as 15 times owing to the increase in overseas remittance. However, due to the influence of the world economic crisis in 2008, migrant laborers returned to the country and therefore overseas remittance decreased by $40 \%$ compared to the amount in previous year

## - Tajikistan

The major destination of migrant laborers from Tajikistan is Russia, accounting for more than $90 \%$ of total. The number of migrant laborers to Russia was 720 thousand in 2007 and 560 thousand in 2008, however, as of January in 2009, 150 thousand lost their jobs and returned to the county. The Ministry of Labor and Social Welfare in Tajikistan reports that the main employment sector of Tajik people in Russia is construction: $46 \%$, service: $15-16 \%$, and agriculture: $9-10 \%$. The construction sector became remarkably depressed in Russia under the financial crisis and this has had a considerable impact, reducing employment opportunities and wages for migrant laborers from Tajikistan. As $75 \%$ of migrant labor returnees are from rural areas, the government is examining countermeasures for promoting agricultural sector development and so on.


Source: Asian Development Bank, "A Study on International Migrants’ Remittances in Central Asia and South Caucasus: Country Report on Remittances of International Migrants in Tajikistan" (Technical Assistance Consultant's Report- Draft), (2008), p.28, Figure 3.1
Note: The blue bar chart is population distribution and the violet bar chart is distribution of migrant labors.

Figure 1-3 Distribution of Population and Migrant Household Members by Region in Tajikistan

According to the ADB report ${ }^{8}$, most migrant laborers are in Khatlon province, accounting for $33 \%$ of the total. Next to this, Sughd in the north has 25.4\%, the Direct Rule Districts (DRD) have $23.5 \%$, and the migrant labor share of Gorno-Badakjstan is $13 \%$. The capital Dushanbe has the lowest share, at 5\%. Sughd and Gorno-Badakhshan have a migrant labor share which exceeds the population share, which implies the share of migrant labors to total population in the region surpasses the same share in other provinces. Analysis results of the ADB sampling survey indicates the share of migrant labor closely relates to the regional economy, that is, more than $90 \%$ of households cannot help but send at least one migrant labor cotton production in the highland area where the living conditions are severe.

The number of migrant laborers to Tajikistan was 20 thousands inflowing from Afghanistan as of 2008. Since unemployment is increased by returnees of Tajik migrant labor to Russia, inward migrant labor from overseas is controlled by presidential decree.

According to the National Bank of Tajikistan, remittance by migrant laborers had a share of

[^9]$30-50 \%$ of GDP, $36 \%$ in 2008, which was $20-23 \%$ less in comparison with the previous year. Reductions in remittance have had a large impact in the macro economy in Tajikistan. In addition, according to the IMF report ${ }^{9}$, the remittance amount in 2008 was estimated as $47 \%$ of GDP - a major source of revenue in current account and support for domestic demand and foreign currency reserves. As of January in 2009, however, remittance from Russia was estimated to decrease by $22 \%$, compared to the amount during the same period of the previous year.

## 1-3 Trends in Foreign Investment and International Trade in Central Asia

## 1-3.1 Foreign Investment Flows in Central Asia

For the whole region, Foreign Direct Investment (FDI) increased although the scale was different in each country.

## - Kazakhstan

Kazakhstan had the most FDI inflow among the countries, with an approximate accumulated amount of 37.9 billion dollars from 1989 to 2007. The net FDI inflow in 2007 was 7.1 billion dollars, a share of $6.8 \%$ of GDP. This, however, decreased to almost half, a 3.4 billion in total inflow in 2008. As for the target areas of investment, petroleum and natural gas development received the largest amount, followed by the service sector such as law and accounting consulting services. Investment in petroleum and natural gas has been implemented mainly by western countries such as USA, England, France, and Holland. Furthermore, China is also a major investor. In 2007, Kazakhstan investment in other countries was observed, investing 3.1 billion dollars overseas against an investment inflow amount of 10.259 billion dollars. The main destinations of investment are the surrounding countries in Central Asia. In particular, there is remarkably increased investment in the financial sector in Kyrgyz.

## - Uzbekistan

The FDI for Uzbekistan had stagnated by the first half of the 2000s because of various regulations by the government. However, it rapidly expanded, 73.9 million dollars in 2007 and 91.8 dollars in 2008. In Uzbekistan, China invests in natural gas and petroleum development projects. Examining the projects with an amount exceeding 1 million dollars, in can be seen that Russian enterprises invest in mobile phone companies and construction material manufacturing companies (privatization) and US enterprises invest in power generation projects, the privatization of construction material companies, and others. In 2007, US General Motors (GM) capitalized GM Uzbekistan (the amount is not made public. GM's share hold is $25 \%$ ).

## - Turkmenistan

Next to Kazakhstan, investment inflow to Turkmenistan is the second largest, with an accumulated amount of 3.928 billion dollars during 1989~2007. For the 6 years from 2003 to 2008, the net FDI inflow amount expanded 5 times, going up to 1.2 billion dollars in 2008, a 6.2 \% share of GDP.

[^10]
## - Kyrgyz Republic

The net FDI inflow amount in Kyrgyz Republic surpassed 100 million dollars in 2004, thereafter however, decreasing to 43 million dollars. There has been a tendency towards increase since 2006, and the amount has reached 224 million dollars. The main target areas for foreign investment are manufacturing and finance. As of 2007, $40 \%$ of foreign investment for Kyrgyz is by Kazakhstan, especially in the financial sector. More than half of the Kyrgyz banks have capital from Kazakhstan. The financial sector in Kazakhstan was damaged by the World Economic Crisis in 2008 and had financial difficulties. Therefore the growth of lending in the financial sector in Kyrgyz slowed down remarkably. At present, financial outflow has not occurred, but for the year ahead, foreign banks will begin to repay a 1.5 million dollar debt with Kazakhstan capital with influence on the financial sector in Kyrgyz.

The largest foreign investment companies in Kyrgyz are Kumtor (gold mining) ${ }^{10}$, a joint company of Canada and Kyrgyz, and Gazpromneft Asia (Gas stations) by Gazprom of Russia, together with some others. In addition, in 2008, the financial sector was newly invested in by Kazakhstan. Batkenneftegaz (petroleum and gas) has been invested in by China and Kant Cement Mill (cement manufacturing) by Cyprus.

## - Tajikistan

The FDI for Tajikistan is the least among the 5 countries in Central Asia. In 2004, there was a net FDI inflow of 272 million dollars. However, this amount decreased to 55 million dollars in 2005 and 66 million dollars in 2006. The FDI increased again in 2007 and 2008, to 160 million and 180 million respectively. Areas such as coal mining were invested in by Kazakhstan. On the other hand, Russian enterprises have been actively investing; approximately 250 enterprises, including joint companies, have been doing business inside Tajikistan.

Tajikistan has a policy to promote hydro power development through foreign investment. Iranian enterprises are the main export destination of electric power and have implemented the construction of the Sangtuda II hydro power plant through BOT, which is planned to commence operations in 2010.

Table 1-12 Trends of Foreign Direct Investment Amount Inflow

| Country | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Accumulated <br> $(1989-2007)$ | Share in GDP <br> $(\%) 2007$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Kyrgyz | 46 | 132 | 43 | 182 | 208 | 224 | 961 | 5.6 |
| Tajikistan | 32 | 272 | 55 | 66 | 160 | 180 | 775 | 4.3 |
| Turkmenistan | 226 | 354 | 418 | 731 | 856 | 1,200 | 3,928 | 6.2 |
| Kazakhstan | 2,213 | 5,436 | 2,123 | 6,630 | 7,100 | 3,400 | 37,868 | 6.8 |
| Uzbekisitan | 70 | 187 | 88 | 195 | 739 | 918 | 2,095 | 3.3 |

Source: EBRD, "Transition Report 2008", Table A.1.1.1.7
Note1: Foreign direct investment amount is net inflow in the balance of international payments.
Note2: The figure in year 2007 is estimated and the figure in year 2008 is predicted.

[^11]
## 1-3.2 Trends of International Trade in Central Asia

In Central Asia in general, trade has been expanding, and the share of trade with non-transition economies in total has increased, promoting diversification in trade.

The trade amount for Kazakhstan, which has the largest-scale economy, is remarkably high, more or less 36 billion dollars in both export and import as of 2007. Turkmenistan and Uzbekistan have the second largest trade amount. The export and import amount for Uzbekistan has increased by 2 or 3 times more, nearly balancing, at almost 6 billion. On the other hand, during the same period, the import amount for Turkmenistan increased only by 1.3 times more, although the export amount increased by more than 2 times to 7.6 billion dollars more than double the import amount of 3.4 billion dollars in 2007. The growth in the export amount in Turkmenistan can be attributed to the recent international price escalation of natural gas, which is its main export item.

Among the 5 countries in Central Asia, Kyrgyz and Tajikistan, small-scale economies, apparently have expanded trade, however, the import amount for both countries is remarkable, having increased by more than 7 times in Kyrgyz and by more than 2 times in Tajikistan. The export amount for both countries has both increased and decreased, not in a set increasing trend, unlike in the other three countries.

Details for trade items and amounts cannot be confirmed for Turkmenistan, Tajikistan, and Uzbekistan. In Central Asia in general, petroleum \& natural gas, mineral resources, and agriculture-related products tend to be the main export items while energy, food, capital and consumable goods are imported.

Table 1-13 International Trade in Central Asia

|  |  |  |  | (Unit: million USD) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Country | 2003 | 2004 | 2005 | 2006 | 2007 |
| Kyrgyz |  |  |  |  |  |
| Export | 581.7 | 726.9 | 633.8 | 796.5 | 1,009.3 |
| Import | 711.9 | 942.5 | 1,111.6 | 1,710.5 | 5,242.9 |
| Tajikistan |  |  |  |  |  |
| Export | 797.1 | 914.9 | 908.7 | 1,398.9 | 979.0 |
| Import | 907.5 | 1,191.1 | 1,330.0 | 1,725.3 | 2,384.6 |
| Turkmenistan |  |  |  |  |  |
| Export | 3,449.1 | 4,062.6 | 5,698.7 | 6,343.5 | 7,646.8 |
| Import | 2,510.9 | 2,729.3 | 2,703.3 | 2,781.2 | 3,427.9 |
| Kazakhstan |  |  |  |  |  |
| Export | 12,926.7 | 20095.2 | 23,508.3 | 29,961.7 | 36,631.7 |
| Import | 8,408.7 | 12,779.6 | 20,155.3 | 27,082.4 | 35,729.5 |
| Uzbekistan |  |  |  |  |  |
| Export | 1,975.0 | 2,697.4 | 3,467.5 | 4,944.3 | 5,912.5 |
| Import | 2,484.6 | 3,156.2 | 3,551.6 | 4,290.9 | 5,678.5 |

Source: ADB, (2008), "Key Indicators for Asia and the Pacific 2008)

In respect of trading partners, Central Asia in general seems to be making progress in diversification. However, the trading relationship between Russia, countries in Central Asia
and CIS is still the most important.
The total amount of the share of trade with non-transition economies showed a downward tendency in Turkmenistan and Uzbekistan from 2003 to 2007, the level being lower than $50 \%$ in both countries. In Kyrgyz, the share dropped to $41.5 \%$ in 2005 but it surpassed $70 \%$ in 2007. In Tajikistan, the share was more or less $45 \%$ during 2003-2005, however, it rose to more than $50 \%$ after 2006. In Kazakhstan, it was stable, at more or less 65\% during 2003-2007.

Table 1-14 indicates the comparison of the main trading partner countries of each country in Central Asia in 1997 and 2007. Russia is in the upper position as an export and import partner in all countries.

## - Turkmenistan

Natural gas \& petroleum and its products account for $80 \%$ of the total exports in Turkmenistan, the remaining being textile and cotton fiber, which are the main industries. The import of machinery is increasing with the recent construction rush, and chemical products and food are also main items.

The Ukraine, the natural gas supply destination, is the largest export partner country for Turkmenistan, with a total export amount up to 3.591 billion dollar as of 2007. Followed by this, the same amount for Iran was 1.351 billion dollar, where the exports were natural gas and the electric power. Iran has the second potential development volume for natural gas next to Russia. However, most of it is located in the gulf coast in the southern area and off-shore. Accordingly natural gas consumed in the northern area of Iran is supplied by imports from Turkmenistan ${ }^{11}$.

The gas supply to the Ukraine is implemented through a pipeline in Russia. There have been conflicts between Russia and the Ukraine over gas supply and the Ukraine suffered when Gazprom of Russia actually halted the gas supply to the Ukraine in January in 2009. Because of this, Turkmenistan has been attempting to diversify the sources of its gas supply and to establish relationships with Iran, China, Afghanistan, India and Pakistan. Nonetheless,

In addition, Turkmenistan exports electric power to Tajikistan, Uzbekistan, Turkey, and Afghanistan.

In terms of imports, Turkmenistan has in the past depended on Russia and the Ukraine for the import of food and consumable goods. However, they have now expanded to import from UEA, Turkey and China. $50 \%$ of food items depends on the import.

- Kyrgyz

The main export items in Kyrgyz are cotton fiber, fur, meat, tobacco, gold, and mercury. Import items are petroleum, machinery, chemical products, and food. In general, dependence on transition economies, including Russia, has reduced, instead there has been a rapid increase

[^12]in imports from China. The import amount from China expanded 4.4 times, to approximately 327 million dollars in 2007 from approximately 73 million dollars in 2003 . The main import item is food. Meanwhile, the relationship with Russia in terms of export and import has also has been maintained as have trade relationships with Kazakhstan and Uzbekistan, as Kyrgyz depends on them for petroleum and natural gas supply.

It is notable that Afghanistan held an upper position amongst the export destinations in 2007. This was because Kyrgyz supplied electric power by hydro power generation.

## - Tajikistan

The main export items in Tajikistan are aluminum, electric power (hydro power generation), and cotton fiber. Hydro power generation and cotton production are possible due to the affluent water resources in Tajikistan, and the aluminum is produced utilizing hydro power generation. The main import items are electric power, petroleum products, oxide of aluminum, machinery, and food.

The export destination for aluminum was Russia foremost, with exports of window sashes and others. As of 2007, exports to Norway, Turkey and other countries had expanded. Cotton fiber is exported to Russia, Swaziland, Latvia, and other countries.

While supplying electricity to Iran, Tajikistan cannot afford to meet the demands of domestic electricity consumption and therefore is supplied with electricity from Uzbekistan and Turkmenistan. The electric power supply from both countries was reduced, however, in 2008 because of the growth of demand and energy price escalation in both countries.

In terms of petroleum and natural gas supply, Tajikistan depends on imports from CIS countries such as Kazakhstan, Uzbekistan, and Azerbaijan. In addition, they depend on imports of bauxite (oxide of the aluminum) from Russia and Ukraine.

In recent years, infrastructure projects have been implemented with assistance from China. Along with this, the machinery and so on has been imported from China, resulting in an expansion in the import amount from China.

Tajikistan has a policy to promote regional cooperation in transportation and hydro power generation and it envisages the expansion of exports of electric power together with the investment promotion. In order to develop trade with the surrounding region, in the framework of EAEC and SCO, alliances of custom have been established, promoting the integration of the custom system and also establishing a free economic zone over frontier areas.

Table 1-14 Trade Partners for Central Asia

| Country |  |  | (Unit: million USD) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Export |  | Import |  |
|  | 1997 | 2007 | 1997 | 2007 |
| Kyrgyz | 1.Uzbekistan (101.5) <br> 2.Russia (98.8) <br> 3.Kazakhstan (87.1) <br> 4.China (31.6) <br> 5.Germany (18.0) <br> 6.Ukraine (4.6) <br> 7.England (1.4) <br> 8.Bulgaria (0.7) | 1.Swiss (212.6) <br> 2.Kazakhstan (201.7) <br> 3.Russia (183.7) <br> 4.Afghanistan (138.3) <br> 5China (83.1) <br> 6. Uzbekistan (35.7) <br> 7.Turkey (36.3) <br> 8.Tajikistan (26.3) <br> 9.UAE (12.2) <br> 10.Canada (0.2) | 1.Russia (190.8) <br> 2.Uzbekistan (128.6) <br> 3.Kazakhstan (69.6) <br> 4.Turkey (43.7) <br> 5.USA (39.6) <br> 6.China (32.5) <br> 7.Turkmenistan (15.5) <br> 8.Azerbaijan (2.5) <br> 9.Armenia (0.2) <br> 10.Moldova (0.4) | 1.China (3,274.8) <br> 2.Russia (849.2) <br> 3.Kazakhstan (246.1) <br> 4.Turkey (167.7) <br> 5.Uzbekistan (93.6) <br> 6.Germany (85.9) <br> 7.USA (67.8) <br> 8.Ukraine (54.8) <br> 9.Holland (35.0) <br> 10.Korea (26.3) |
| Tajikistan | 1.Uzbekistan (249.4) <br> 2.Russia (87.8) <br> 3.USA (7.8) <br> 4.Kazakhstan (5.7) <br> 5.England (2.2) <br> 6.Japan (1.1) <br> 7.Holland (0.9) <br> 8.Swiss (0.6) | 1.Norway (152.4) <br> 2.Turkey (130.3) <br> 3.Italia (99.4) <br> 4.Iran (99.1) <br> 5.Russia (85.5) <br> 6.Uzbekistan (80.5) <br> 7.Kazakhstan (33.2) <br> 8.Swiss (27.1) <br> 9.Holland (26.0) <br> 10.Latvia (0.8) | 1.Uzbekistan (198.9) <br> 2.Russi (98.5) <br> 3.England (2.6) <br> 4.Swiss (0.8) <br> 5.Kazakhstan (60.5) <br> 6.Turkmenistan (32.7) <br> 7.Holland (4.5) <br> 8.USA (20.5) <br> 9.Germany (10.9) | 1.Russia (503.5) <br> 2.China (493.8) <br> 3.Kazakhstan (222.9) <br> 4.Uzbekistan (210.5) <br> 5.Azerbaijan (164.9) <br> 6.Turkey (129.4) <br> 7.Ukraine (76.8) <br> 8.Turkmenistan (71.9) <br> 9.USA (58.0) <br> 10.Italia (14.2) |
| Turkmenistan | 1.Iran (123.5) <br> 2.Russia (56.7) <br> 3.Turkey (51.0) <br> 4.Kazakhstan (30.8) <br> 5.Afghanistan (20.9) <br> 6.Swiss (18.2) <br> 7.Hongkong (China) <br> (16.2) <br> 8.Italia (6.3) <br> 9.Germany (2.7) <br> 10.Ukraine (1.0) | 1.Ukraine $(3,591.5)$ <br> 2.Iran $(1,351.5)$ <br> 3.Azerbaijan (400.4) <br> 4.Turkey (360.8) <br> 5.UAE (253.3) <br> 6.USA (213.0) <br> 7.Italia (197.4) <br> 8.Afghanistan (163.3) <br> 9.Armenia (152.2) <br> 10.Hungary (0.3) | 1.Ukraine (283.9) <br> 2.Russia (164.0) <br> 3.Turkey (153.8) <br> 4.USA (88.0) <br> 5.Uzbekistan (87.9) <br> 6.Kazakhstan (86.9) <br> 7.Iran (38.8) <br> 8.France (47.9) <br> 9.UAE (25.9) <br> 10.Germany (16.3) | 1.UEA (491.3) <br> 2.Turkey (372.9) <br> 3.China (344.0) <br> 4.Ukraine (303.7) <br> 5.Russia (285.4) <br> 6.Iran (240.2) <br> 7.Germany (238.2) <br> 8.USA (203.2) <br> 9.France (55.9) <br> 10.Azerbaijan (12.5) |
| Kazakhstan | 1.Russia (2,157.1) <br> 2.England (548.7) <br> 3.China (442.2) <br> 4.Italia (357.3) <br> 5.Germany (353.0) <br> 6.Ukraine (303.5) <br> 7.Swiss (286.0) <br> 8.Holland (203.6) <br> 9.Uzbekistan (148.4) <br> 10.Korea (129.6) | 1.China $(5,606.0)$ <br> 2.Germany (4,314.7) <br> 3,Russia $(4,167.8)$ <br> 4.Italia ( $2,714.4$ ) <br> 5.France $(2,530.0)$ <br> 6.Iran $(1,456.9)$ <br> 7.Rumania (1,236.2) <br> 8.USA $(1,172.7)$ <br> 9.Turkey (1,167.2) <br> 10.Swiss (389.4) | 1.Russia (1,965.7) <br> 2.Germany (367.7) <br> 3.USA (201.7) <br> 4.Turkey (177.0) <br> 5.Ukraine (93.3) <br> 6.Uzbekistan (65.6) <br> 7.Belarus (58.4) <br> 8.China (46.6) <br> 9.Turkmenistan (32.5) <br> 10.Azerbaijan (19.4) | 1.Russia $(12,166.0)$ <br> 2.China ( $7,995.3$ ) <br> 3.Germany $(2,951.1)$ <br> 4.Turkey $(1,188.1)$ <br> 5. Ukraine ( $1,082.6$ ) <br> 6.Italia (872.5) <br> 7.USA (828.3) <br> 8.France (697.7) <br> 9.England (695.9) <br> 10.Holland (608.3) |
| Uzbekistan | 1.Russia (923.3) <br> 2.Italia (197.2) <br> 3.Tajikistan (180.8) <br> 4.Ukraine (179.0) <br> 5.China (127.2) <br> 6.Germany (121.1) <br> 7.Brazil (102.7) <br> 8.Poland (100.1) <br> 9.France (92.2) <br> 10.Kazakhstan (59.6) | 1.Russia $(1,455.8)$ <br> 2.Poland (633.9) <br> 3.Turkey (558.0) <br> 4.Hungary (358.6) <br> 5.Kazakhstan (348.8) <br> 6.China (333.5) <br> 7.Ukraine (275.3) <br> 8.Bangladesh (256.1) <br> 9.Tajikistan (191.4) <br> 10.Japan (131.7) | 1.Russia (962.2) <br> 2.Korea (742.9) <br> 3.Germany (483.2) <br> 4.Ukraine (303.3) <br> 5.Tajikistan (274.4) <br> 6.USA (257.6) <br> 7.Turkey (231.6) <br> 8.Kazakhstan (163.2) <br> 9.France (70.1) <br> 10.Japan (60.7) | 1.Russia $(1,475.3)$ <br> 2.China (790.9) <br> 3.Korea (778.2) <br> 4.Germany (395.9) <br> 5.Kazakhstan (373.9) <br> 6.Turkey (247.6) <br> 7.Ukraine (244.4) <br> 8.USA (97.6) <br> 9.Tajikistan (88.5) <br> 10.Italia (74.1) |

Source: ADB, "Key Indicators for Asia and the Pacific 2008" and "Key Indicators of Developing Asia and the Pacific Countries 1999"
Note: Data for Turkmenistan is from "Key Indicators of Developing Asia and the Pacific Countries 2001" because they joined in ADB in 2000.


Source: EBRD, "Transition Report 2008", Country Assessments
Figure 1-4 International Trade in Kyrgyz


Figure 1-5 International Trade in Tajikistan


Figure 1-6 International Trade in Turkmenistan


Figure 1-7 International Trade in Kazakhstan


Figure 1-8 International Trade in Uzbekistan

## - Expectations for Trade Expansion between Central Asia and South Asia through Electricity Transactions

On May 8, 2009, in Washington D.C., the prime ministers of both Afghanistan and Pakistan gave a joint speech on the project of electricity transactions with Central Asia.

This project is based on the concept of trading electric power in Central and South Asia: the "Central Asia - South Asia Regional Electricity Market (CASAREM)". After 2005, Afghanistan, Pakistan, Kyrgyz and Tajikistan in Central Asia participated in this market, promoted with assistance by international financial institutions such as the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the World Bank (WB), the International Finance Corporation (IFC), and the Islamic Development Bank (IsDB). As the first phase, it was planned that the "CASA-1000" project be implemented, which is the construction of transmission lines for1,000 MW electric power trading between Central and South Asia.

The project outline is to construct a wide-area transmission line, aiming to use surplus electric power during the summer time in Tajikistan and Kyrgyz which have hydro power projects through their affluent water resources, and to export it to Afghanistan and Pakistan in South Asia. The following components are planned:

- Construction of a 500 kV high voltage direct current (HVDC) transmission line, approximately 750 kilometers from Tajikistan through Afghanistan to Pakistan.
- Construction of substations in Kabul (Afghanistan), Peshawar (Pakistan), and Sangtuda (Tajikistan)
- Construction of an alternating current transmission connection between Kyrgyz and Tajikistan in order to supply electric power from Kyrgyz through Tajikistan for South
- Establishment of an institutional and legal framework for the electricity transaction

By 2015, there will be no new operations of hydro power plants in Kyrgyz and Tajikistan; therefore, the export of electric power will be only during the summer time. This is an important source of foreign currency revenue for Kyrgyz and Tajikistan. Kyrgyz has to release water for agriculture use for Kazakhstan and Uzbekistan in the downstream area during the summer time. Despite this fact, however, the domestic power demand becomes low, and accordingly, the water release is not economical. Realizing the export of electricity will reduce this loss of economic opportunity.

A special purpose company (SPC) is planned as a project execution agency, with the participation of the private sector, instead of the Kyrgyz, Tajikistan, Afghanistan, and Pakistan government. As a result, through infrastructure construction for the establishment of the electricity transaction market, this is expected to be an opportunity for stimulating private investment in Kyrgyz and Tajikistan.

In spite of not participating in this project, Uzbekistan will possibly have more interest in the area-wide project in the future because strengthening the transmission line is promoted in Uzbekistan to Afghanistan and Tajikistan to Afghanistan. Furthermore, Turkmenistan supplies electric power for Afghanistan and Tajikistan mainly during the winter time, and thus they will possibly be interested in common export of electricity for South Asia by CASA-1000. It is expected that this area-wide project will strengthen the trading relationships of electric power between Central Asia and South Asia.

## 2 Development Needs and Issues of Turkmenistan



Source: Economic Intelligent Unit, "EIU Country Report Turkmenistan", April 2009
Figure 2-1 Map of Turkmenistan

## 2-1 Outline of Development Strategy and Core Sectors

There are many development programs and strategies for Turkmenistan, the core strategy of which is the Strategy for the Economic, Political, and Cultural Development of Turkmenistan for the Period to 2020. This development strategy will be updated as necessary until 2030, based on the current international economic situation.

In addition to the development strategy, there are many programs planned by various government ministries, such as "The National Program of the President of Turkmenistan to Improve Living Conditions of the Population of Villages, Towns, Regional Towns and Regional Centers for the Period up to Year 2020."

The main programs planned by government ministries are related to health, water supply and sewage disposal in Ashgabat (2002-2050), and development strategies for the oil and gas industries (until 2030). There are also projects related to the modernization and development of building structures as well as to community development. Each of these projects furthers the developmental strategy indicated by targets and goals, however, there is little connection between these projects.

Regarding the "The National Program of the President of Turkmenistan to Improve Living Conditions of the Population of Villages, Towns, Regional Towns and Regional Centers for the Period up to Year 2020," there was an announcement of the project outlines in local Russian newspapers and in the Turkmenistan media. However, no announcement of programs was made by the government ministries.

## 2-1.1 Outline of "The Strategy for the Economic, Political, and Cultural Development of Turkmenistan for the Period up to Year 2020"

The program was approved and adopted by the joint conference of the 14th State Elders quorum of Turkmenistan, the People's Council, and the Nationwide Movement "Galknysh" on August 15, 2003. There are three top-priority tasks for the development strategy. These development priorities and the strategic objectives are shown in Table 2-1.

Table 2-1 Development Priorities and Strategic Goals

| Development Priorities | Major Objectives |
| :---: | :---: |
| Achievement at the level of developed countries, preservation of economic independence and security with a high rate of economic growth, adoption of new technology and productivity improvement. | Maintaining the state as a neutral country, Turkmenistan cooperates with counterparts for mutual benefit. <br> - Transition to a market economy. <br> - Development of entrepreneurial activity. <br> - Establishment of investment climate. <br> - The Aggregate Output (AGO) Target |
| Steady increase of gross production per capita. | - The aggregate output of product per capita AGO: 66.8 million mantas (8.3 times as much as in 2000). <br> - The salary of workers (state sector enterprises): 50\% increase by 2005 (from 2003). To double every five years. In 2020 to be 12 times as much as in 2003. <br> - Social security: public utilities charges/basic needs etc. (electricity, gas, water, salt, education and public health care) free-of-charge services. Subsidy (residential rent, public transport and telephone communication services). Tax-free private housing. |
| High investment activity and expansion of construction of industrial facilities. | - Investment plan of key economic sectors (Refer to Table 2-2). |

Source: "The strategy for the economic, political and cultural development of Turkmenistan for the period up to year 2020."

## 2-1.2 Development plan for Key Economic Sectors

In the development strategy, besides these top priorities, there are other main goals up to 2020, for electric power, oil, gas, the textile industry, agriculture, transportation, telecommunications,
medical care, and education. There appear to be development strategy documents for each sector based on the development strategy, however, the content of these has not been made public.

Table 2-2 Investment Plan of Key Economic Sectors

| Sectors | Goal | Project |
| :---: | :---: | :---: |
| Power industry | - Full satisfaction of domestic demand. <br> - Increased exports to such countries as Iran, Turkey, Afghanistan, Pakistan, and the Central Asian states. | - Renovation of active power stations. <br> - Construction of new power stations. |
| Oil and gas | - Gas supply from about 170 gas wells. | - Large-scale works in the sphere of geological survey. <br> - Development of oil and gas fields, such as Kelker, Yolbars, Korpedje, Chekishlyar, and of other deposits. |
| Chemical | - Production of mineral fertilizers: 550 thousand tons. <br> - Production of carbamide fertilizers: 350 thousand tons <br> - Organization of export-oriented scale of production of mechanical rubber goods. <br> - Increase in the gross amount of engineering and metalworking production by a factor of 9 during 2011-2020. | - Construction of chemical plants producing potassium chloride, potassium sulfate, caustic soda, and chlorine. <br> - Commissioning of carbamide plant. <br> - Construction of paintwork material producing plant. <br> - Construction of sulfuric acid and ammonium sulfate producing workshops. <br> - Renovation and modernization of natural sulfur and technical iodine production. <br> - Starting from 2010, production of ferrous bromide in the Balkan Velayat region <br> - Construction of an aluminum-melting and metallurgical works in Mary Velayat. |
| Textiles | - Cotton Processing: 500,000 tons <br> - Expand assortment of cotton products. | - Construction of 6 textile complexes and 8 cotton spinning mills. (2010-2020) <br> - Renovation of cotton complex in Ashgabat, 4 cotton spinning mills and 2 garment factories in Mary and wool-preprocessing factory in Mary. |
| Construction | - Volume of cement production for new construction and reconstruction of active industrial objects: 4 million tons <br> - Satisfaction of demands of individual housing construction consumers: increase capacities of wall and building brick production by a factor of 6 . | - Construction of three cement plants in the Magdanly-Karlyuk district of Lebap Velayat and in Balkan Velayat. (Total capacity 2.55 million tons per year). <br> - Construction of new brick-making plants (using up-to-date technology) |
| Agriculture | - Complete satisfaction of the population food requirements. <br> - Expand exports. <br> - Wheat production: 2.9 times as much as in 2000. <br> - Raw cotton production: 4.9 times. <br> - Cattle population: 3.1 times. <br> - Small cattle stock population: 3.6 times. <br> - Agriculture gross production volume: about $70 \%$ increase. <br> - Increase of irrigated lands. <br> - Increase of private land users share. | - Land improvement (soil-reclamation supply of acres with the creation of Turkmen Lake) <br> - Increase in productivity in cattle-breeding and aviculture. <br> - Improvement of production technology <br> - Construction of hydraulic facilities complex reservoir. <br> - Introduction of 2-3 harvests of certain kinds of crops. <br> - Support for farmers. <br> - Reform of agricultural production system. <br> - Organizational forms of private land utilization by nongovernmental sector. |


| Sectors | Goal | Project |
| :---: | :---: | :---: |
| Transportation | - Transportation system: one fifth of national income. | - Reconstruction of motor roads: <br> a Serdar-Etrek-Gudirolum <br> b Mary-Serkhetabad <br> c Tejen-Serakhs <br> d Turkmenbashi-Garabogaz (border with Kazakhstan) <br> - Operation of North-South Transport Corridor (from the Kzakhstan border to Turkmenbashi and from Bereket to Etrek) <br> - Construction of new domestic railway. <br> - Operation of domestic railway. |
| Communication | - Modernization of telephone network replacing all automatic telephone exchanges with up-to-date digital equipment. <br> - Installation of fiber optic communication for all inhabited localities of Turkmenistan. <br> - Complete satisfaction of population needs in telephone communication services. <br> - Increase of 6.1 times in number of telephone sets: <br> - Amount of telephone sets: 2,250,000. <br> - A wide range of choice of models of telephone and services. <br> - Provision of office e-mail (Enterprises and organizations). | - Deployment of new digital automatic telephone exchanges. <br> - Expansion of international communication channels network. <br> - Increase in number of telephone sets |
| Health care | - Raise in the level of health care services to developed world level. | - Construction of hospitals, polyclinics and diagnostic centers. |
| Education | - Capacities of schools to be increased by a factor of 21. <br> - Quantity of places in kindergartens to be increased by a factor of 24 . <br> - Raise in cultural level of the population. | - Construction of libraries, theaters and cinemas. |
| Housing | - Provision of comfort condition housing. <br> - Provision of the population with living area increased to 35 cubic meters. | - Introduction of regulations of habitation in accordance with European standards. |
| Finance | - Provision of financial stability. <br> - Strengthening of purchase power of Manat (national currency). <br> - Increased value of Manat. <br> - Maintenance of prices at stable level. <br> - Expansion of credit up to $50 \%$ for credit granted to private sector. <br> - Increase in number of mortgage loans. | - |
| Investments | - Amount of investment to be 17.1 times as much as in 2000. | - |

Source: "The strategy for the economic, political and cultural development of Turkmenistan for the period up to year 2020"

## 2-1.3 Features of the Development Strategy

The strategic objective of the National Program is aimed at the transformation of Turkmenistan to a European standard level and at increasing the economic, socioeconomic and technology development indexes to conform to advanced nation level by 2020.

Moreover, there is a strong tendency to attempt to reach these goals through the improvement of hard infrastructure. From detailed descriptions relating to the oil, gas, chemical, textile, and construction industries, concerning cement plants, brick factories and so on, also relating to the transportation and communication sectors, it can be seen that foreign investment into those sectors is expected. In fact, in Turkmenistan, especially in Ashkhabad, there is now a boom in construction. Government buildings are being constructed by a French companies, and residential housing built by Turkish companies.

Most factories were built through schemes of the Export-Import Bank of Japan and the European Bank for Reconstruction. It can thus be seen that these construction jobs are heavily dependent on foreign technology.

In published information, there is little description of soft infrastructure such as human resource development. The focus seems to be on hard infrastructure. There are goals for the finance and investment fields, but there are no specific policies for these fields. Many donors who support Turkmenistan are worried about human resource development.

Turkmenistan has been accepting aid from donors mainly for technical assistance. Apart from the factory construction examples given above, the absorption of practice from developed counties through training and seminars has been the aim.

## 2-2 Analysis of Major sectors

## 2-2.1 Power

## - Current Conditions

In Turkmenistan, the Ministry of Energy and Industry consists of four public corporations, including the TurkmenEnergo State Power Engineering Corporation which covers generation and the supply of electricity. The other corporations cover construction, manufacturing, and research for electrical power systems.

Table 2-3 Electricity Corporations under the Ministry of Energy and Industry

| Corporation Responsibility | Name of Corporation |
| :--- | :--- |
| Generation and supply of electricity | TurkmenEnergo State Power Engineering <br> Corporation |
| Construction of power system <br> (civil engineering) | TurkmenEnergoGurlushyk Concern |
| Manufacture of power equipment | TurkmenMachineGurkushyk Concern |
| Research for power systems | TurkmenEnergoTaslama Institute |

Source: Ministry of Energy and Industry of Turkmenistan, "Power Industry: New Perspectives"

Currently, eight power plants and six affiliated companies form TurkmenEnergo to generate and supply electricity. Turkmenistan's first hydroelectric power station was constructed in 1913 near the Murgab River. The first thermoelectric power station at Turkmenbashy was opened in 1945.

Power stations built in 1970s and 80s are now renovated and modernized. There are also plans to build additional new power station.

Table 2－4 Outline of electric power facilities

| Installed Capacity（MW） | 3,921 |
| :---: | ---: |
| Hydro power（MW） | 1 |
| Thermal power（MW） | 3,920 |
| Power Generation（GWh） | 11,191 |
| Hydro power（MW） | 3 |
| Thermal power（MW） | 11,188 |
| Power Generation Capacity（MW） | - |
| Peak Demand（MW） | - |
| Power Consumption（MW） | 8,908 |

Source：JICA and MOFA「中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書」（2009）p．3－4，Table 3－1

Table 2－5 Outline of Major Power Plant

| Hydro／Thermal | Name of Plant | Installed <br> （MW） | Generation <br> $(\mathrm{GWh})$ | Fuel Type | Operation |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Hydro power | Gindulush | 1.2 |  | - | - |
| Thermal power | Turkmenbashy | 540 | - | Disel | 1913 |
|  | Balkababad | 126 | - | - | ,- 2003 |
|  | Abadan | 321 | - | - | $-, 1998,2003$ |
|  | Ashgabat | 254.2 | - | - | 2006 |
|  | Mary | 1685 | - | - | 1973 |
|  | Seidi | 160 | - | - | 1992,2004 |
|  | Dashoguz | 254.2 |  | - | 2007 |
|  | Total capacity | 331.6 | $14,033-$ |  |  |

Source：Ministry of Energy and Industry of Turkmenistan，＂Power Industry：New Perspectives＂

According to＂Power Industry ；New Perspectives＂published by the Ministry of Technology and Turkmenistan Energy，electric power in Turkmenistan is fully covered by generation from natural gas．In 2007，the total electricity generated was 14 trillion kWh ．There is no available data for the total extension of electric lines，but according to the power industry data book，there are several thousand kilometers of electric lines，hundreds of large power stations and thousands of small power stations working safely and steadily under proper maintenance．


Source：OECD／IEA Energy Statistics
Figure 2－2 Electric Power by Generation Method

According to a study report by JICA and MOFA ${ }^{12}$ which was published in February 2009， power generation and consumption have been tracking each other very closely since 1992.


Source：JICA and MOFA「中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書」（2009）

Figure 2－3 Power Consumption and Generation in Turkmenistan

[^13]Currently，Turkmenistan does not belong to the area linkage system，however，the area linkage transmission grid，maintained during the Soviet era，is used to export electricity to Tadzhikistan． Since there is linkage for use of the transmission grid with Tadzhikistan，electricity exported from Turkmenistan to Uzbekistan is routed through Tadzhikistan．

Table 2－6 The Outline of the Central Asia Power System（CAPS）

| Transmission <br> Line | Point 1 | Point 2 | Voltage <br> $(\mathrm{kV})$ | Length <br> $(\mathrm{km})$ | Transmission <br> Capacity（MVA） |
| :---: | :--- | :--- | :---: | :---: | :---: |
| Uzbekistan－Kirghiz |  |  |  |  |  |
| L－512 | Karakul SS | Serdar SS | 500 | 369 | 2,000 |
| L－K－4 | Karakul SS | Chardjou SS | 220 | 67.4 | 314 |

Source：JICA and MOFA「中央アジア地域の電カ・水資源に関する地域連携に関する委託調査報告」（2009）p．3－7，Table 3－4

## －Development Issues and Policies

It is forecasted that domestic power consumption and export will increase up to 20 billion kWh and 1,157 billion kWh ，respectively by $2020^{13}$ ．Therefore，the Turkmenistan government has plans to modernize existing steam power plants to meet the power demand in the future．The Mary power plant was renovated in 2006 as a start to these plans．Power generation is planned to increase by about 500 MW by modernizing existing power plants．

Additionally，an up－to－date gas turbine power plant is now under construction．The Balkanabad power plant is scheduled for a＂test drive，＂and another power plant，which will produce 254.2 MW ，is under construction in Abaza．The Abaza power plant is expected to supply electricity to the Abaza sightseeing region．There is another gas turbine station under construction in the state of Ahal（east of Ashgabat）．The power plants in Abaza and Ahal are scheduled for trial runs in 2010.

The construction of high－voltage electrical power lines is also planned in order to reduce power loss．Power line construction planning is as follows；
－The Parahat－Pelvert－Atamurat line
－The Mary－Tahrtabazar electric main
The Mary－Tahrtabazar power line is aimed not only to transmit electricity to Gunorta Yoloten， Gurrukbil，and Garabil，but also to increase electric power exports to Afghanistan．In addition， construction of the electricity grid is also being considered．The construction of 28 substations will be scheduled in Ashgabate in next two to three years．There is also a plan for the relaying of electric wires to supply housing and streetlights．Moreover，the construction of a power line of $24,000 \mathrm{~km}$ or more is also scheduled in regions other than Ashgabad，based on the program， ＂The National Program of the President of Turkmenistan to Improve Living Conditions of the Population of Villages，Towns，Regional Towns and Regional Centers for the Period up to Year 2020．＂

## －Donors＇Support

There isn＇t any support from donors in the power sector，and this not planned in the future．

[^14]
## 2-2.2 Transport

- Current Conditions

During 2008, total freightage in Turkmenistan amounted to 49,206.9 million ton-kilometers. Freightage pipeline transport was $56 \%$ and this was followed by rail transport, $24 \%$ and by motor transport, $20 \%$. For the total value of passenger turnover, motor transport makes up $84 \%$ and this is followed by much less used air (9\%) and rail transportation (7\%).


Source: State Committee of Turkmenistan for Statistics
Figure 2-4 Freight turnover of Turkmenistan by Mode, (2008, \%)


Source: State Committee of Turkmenistan for Statistics
Figure 2-5 Revenue of Passenger Transport by Revenue (2008, \%)

The reason for these tendencies is related to the fact that the density of population in Turkmenistan is low. Air and rail transportation services are available only between the regional centers of Velayat, and the inter-district transportation from the Etraps to Velayat centers are provided only by motor transport.

Table 2-7 Total Length of Roads and Railway

| (Unit: 1,000 km) |  |  |
| :---: | :---: | :---: |
| Motor roads (2002) | Paved roads (2002) | Railways (2007) |
| 58.59 | 47.58 | 3.1 |

Source: Investment Guide p. 66 (Railway) and CIA The World Factbook - Turkmenistan (Road) (https://www.cia.gov/library/publications/the-world-factbook/geos/tx.html as of June 2009)

The total length of motor roads amounted to $58,592 \mathrm{~km}$ in 2002, with 47,577 roads. Over $80 \%$ of motor roads were paved. As stated above, motor transport is the most important form of domestic transportation. According to the investment guide, the volume conveyed by motor transport amounts to 100 million people and about 5 million tons of freight transported annually.

At the present time, large-scale works on the construction and renovation of the main highways of Turkmenbashi-Ashgabat-Mary-Turkmenabad and Ashgabat-Karaku-Dashoguz is being undertaken. These projects are planned to be completed by 2010.

Presently, the total length of railways amounts to about $3,100 \mathrm{~km}$, and 1200 km have been laid during the past 16 years. According to the investment guide, more than $80 \%$ of the total international transports are carried by railway transport. Due to this, construction and renovation of rail transport are recently underway. Since becoming independent, the volume of freight transportation by railways has increased annually; the total volume amounted to 2.34 million tons of freight and 5.8 million passengers in 2007. Turkmenistan is also one of the main centers for transit cargo transportation. $70 \%$ of all freight transported by rail annually is freight travelling as transit goods through Sarakhs station, where about 400 freight cars are serviced daily ${ }^{14}$.


Source: State Committee of Turkmenistan for Statistics
Figure 2-6 Cargo Transport by Railway

In 2008, 41.2\% of cargo transportation was construction material, which reflected the construction boom in Turkmenistan. Oil and petroleum products came next with $37.2 \%$. These two categories accounted for about $80 \%$ of the entire transport cargo.

[^15]Since independence, the following new railway lines have been constructed: Tejen - Sarahs; Turkmenabat - Atamyrat; Dashoguz - Koneurgench. The Ashgabat-Karakum-Dashouguz line has been already completed.

During the years since independence, air transport has also been developed. Air-terminal complexes in Ashgabat and Mary have already been modernized and in Turkmenbashi, the construction of a new air terminal has begun. At the present time, Turkmenistan has regular flight services to 11 other countries. The Caspian Sea transport has also been increasing recently. A large-scale renovation of the Turkmenbashi seaport has been completed, doubling its freight capacity.

## - Development Issues and Policies

Currently, a long international railway line Uzen (Kazakhstan)-Bereket-Etrek-Gourgan (Iran) is under construction. This "North-South" transport corridor project by the Turkmenistan government is being carried out in two directions: Bereket-Etrek-Gorgan ( 327 km , 256.5 km of line will pass through Turkmenistan.) and Bereket-Gyzylkaya-Uzen (571km, 441km lies across Turkmenistan).


Source: Investment Guide, p. 66
Figure 2-7 Railway Network and Planned New Lines in Turkmenistan

The construction of 7 stations and auxiliary lines with total length 73 km are planned for the Bereket-Etruk-Gorgan line. The construction of a locomotive depot and technical maintenance center for railway carriages and freight cars in Etrek is also planned. On the Berelet-Gyzylkaya-Uzen line, 10 stations and auxiliary lines with a total length 99 km are planned, together with a locomotive depot and technical maintenance center in Gyzylgaya. The National program mentions that the Turkmen section of the North-South Transport Corridor will be put into operation; a new railroad Ashgabat-Kara-Kum-Dashoguz will be constructed, and a railroad line for Tejen-Babadayhan will be brought into service. According to the investment guide, as shown in Figure 2-7, there is a project to construct new railways from

Kerkichi to Afghanistan；however，the National program for the period up to year 2020 does not refer to the project．


Source：JICA「中央アジア地域貿易促進プロジェクト形成調査（一次調査）報告書」（2007）

Figure 2－8 The route of the Asian highway project through the territory of Turkmenistan

The National program mentions the Asian highway project，which is supposed to be completed by 2020：a．Serdar－Etrek－Gudirolum（A part of AH5 and AH70）；b．Mary－Serkhetabad（AH77）； c．Tejen－Serakhs（AH75）Turkmenbashi－Garabogaz－the boundary of Kazakhstan A part of AH70）．The line of Mary－Serkhetabad（AH77）is route into Afghanistan．

## －Donors＇Support

Foreign aid to the transportation sector board of directors，was approved by the World Bank and EBRD in 1997，and has already been completed．The World Bank project（Urban Transport Project）was aimed at improving the management of urban traffic transportation and the rehabilitation of vehicles in Ashgabat，Mary，and Chardjou．EBRD provided a loan for the project of the restoration of Turkmenbashi Port．Currently，no new projects are scheduled．

Table 2-8 Projects Financed by Donors

| Donor | Project | Approval/Status | Outline of Project |
| :---: | :--- | :---: | :--- |
| WB | Urban Transport Project | $1997 / 5 / 27$ <br> Completed | Improvement of management of urban <br> traffic transportation and rehabilitation of <br> vehicles in Ashgabat, Mary, and Chardjou. |
| EBRD | Turkmenbashi Port Development | $1997 / 12 / 16$ <br> Completed | Restoration of Turkmenbashi Port |

Source: WB and EBRD websites

## 2-2.3 Water and Sanitation

## - Current Conditions

About $80 \%$ to $90 \%$ of Turkmenistan is desert and water is a very valuable resource. Water comes from surface and ground resources, surface water coming from the following large rivers the Amu-Darya, Murgab, Tejen.and Etrek. The Amu-Darya plays a significant role in meeting $90 \%$ of domestic water supply demands through the Karakumu canal ${ }^{15}$.

Table 2-9 Water Resources and Use

|  | 1992 | 1997 | 2002 | 2007 |
| :--- | ---: | ---: | ---: | ---: |
| Total renewable water* (billion $\mathrm{m}^{3}$ per year) | - | - | - | 25 |
| Internal renewable water** $\left(\right.$ billion $\mathrm{m}^{3}$ per year) | - | - | - | 1 |
| Renewable water per capita $\left(\mathrm{m}^{3}\right.$ per year) | 6,363 | 5,703 | 5,339 | 4,979 |
| Domestic water withdrawal per capita $\left(\mathrm{m}^{3}\right.$ per year) | 49.2 | 80.5 | 90.7 | - |
| Annual withdrawals of ground and surface water <br> (\% of total renewable water) | 100.1 | 96.2 | 99.7 | - |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of June 2009)
Notes: $1 *$ The sum of internal renewable water resources and natural incoming flow originating from outside the country, taking into consideration the quantity of flow reserved for upstream and downstream countries through formal or informal agreements or treaties. This gives the maximum theoretical amount of water actually available for a country
Note 2:** Internal renewable water is the average annual flow of rivers and recharge of groundwater generated from endogenous precipitation

Table 2-10 Water Use by Sector

|  | 1992 | 1997 | 2002 |
| :--- | ---: | ---: | ---: |
| Total water withdrawal (billion $\mathrm{m}^{3}$ per year) | 24.7 | 23.8 | 24.7 |
| Domestic use | $0.8 \%$ | $1.5 \%$ | $1.7 \%$ |
| Use for Agriculture | $98.7 \%$ | $97.9 \%$ | $97.5 \%$ |
| Use for Industry | $0.5 \%$ | $0.6 \%$ | $0.8 \%$ |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of June 2009)

[^16]Among the water use by sector, the agriculture use has the largest share of $97.5 \%$ in 2002 while the domestic use and industrial use were gradually increasing. There are concerns that the water shortage can be occurred due to a further increase in water use since the country's development strategy aims at expansion of irrigated lands.

According to the UNICEF Turkmenistan office, quality of water varies in region, and access of both school and households to potable water and sanitation are not sufficient. The Joint Survey conducted by the World Health Organization (WHO) and UNICEF in 2006 indicated that the share of households with connection to tapped water remained at $54.9 \%$ in urban area and further limited to only $3.1 \%$ in rural area. The share of population with access to improved portable water, including wells and water truck, was $91 \%$ in urban area and $58 \%$ in rural area. The U.S embassy in Turkmenistan warns travelers that the water is not appropriate for drinking because of aging and poorly maintained water pipes.

Table 2-11 Access to Improved Water in Turkmenistan (2006)

| Source of Water | Urban | Rural |
| :--- | ---: | ---: |
| Piped into dwelling | 54.9 | 3.1 |
| Piped into yard or plot | 23.2 | 15.2 |
| Public tap / standpipe | 4.7 | 4.0 |
| Tubewell / borehole | 4.2 | 19.1 |
| Protected well | 1.0 | 15.8 |
| Protected spring | 0.0 | 0.6 |
| Rainwater collection | 0.5 | 0.4 |
| Bottled water | 2.6 | 0.0 |
| Unprotected well | 0.0 | 0.9 |
| Unprotected spring | 0.0 | 0.6 |
| Tanker-truck | 8.7 | 33.2 |
| Cart with small tank / drum | 0.2 | 0.1 |
| Surface water | 0.0 | 6.8 |
| Other | 0.1 | 0.1 |
| Total | 100.1 | 99.9 |
| Access to improved drinking water sources | $91 \%$ | $58 \%$ |
| \% House connections | $78 \%$ | $18 \%$ |

Source: WHO/ UNICEF, "Joint Monitoring Programme for Water Supply and Sanitation Coverage Estimates Improved Drinking Water", (2008)

## - Development Issues and Policies

As mentioned above, increased of water usage, will result in concerns about water shortages. There is a project to construct the Dostluk (reservoir: hydraulic facilities complex with a water-retaining structure which will be able to contain 1.25 billion $\mathrm{m}^{3}$ of water) There is also another national project to construct a man-made Turkmen lake.

The Turkmen Lake is now being constructed in the Karakum desert. According to the investment guide, it is expected to play an important role in the improvement of the conditions of land under irrigation, and rational use of water resources. The long-term perspective is the
reclamation of the south-western subtropical zone of Turkmenistan.
These plans are similar to the "Natural Remodeling Plan," large-scale irrigation of farmland, which was carried out in the former Soviet Union in the 1960's. There is concern about salt damage in the poorly-drained farmlands where there is construction in the desert, and about the shrinking the Aral Sea, caused by excessive water withdrawal from the Amu Dar'ya river. These problems are already being reported in Kazafstan and Uzbekistan.

Since the President of Turkmenistan has been seriously addressing environmental problems, disclosure of environmental information has been relatively opened in comparing with other sectors. However, there is no information about countermeasures being taken against anticipated adverse impacts on the environment by the Turkmen lake project.


Source: "Investment Guide", p. 46
Figure 2-9 The Turkmen Lake Project

## - Donors'Support

WB provided a financial assistance for "Water Supply \& Sanitation Project" which has already been completed. The Project aimed to improve the water supply infrastructure in the urban and rural areas, repairing toilets and setting hand washing places in schools and markets. UNICEF has been working on water supply and sanitation projects at the community level16. Currently, no new projects are scheduled.

[^17]Table 2-12 Projects Financed by Major Donors

| Donor | Project | Approval/Status | Component |
| :---: | :--- | :---: | :--- |
| WB |  <br> Sanitation Project | $1997 / 5 / 27$ <br> completed | Improvement of the water supply <br> infrastructure in urban and rural areas, <br> repairing toilets and setting up hand <br> washing places in schools and markets. |
| UNICEF | Water, Environment and <br> Sanitation (WES) <br> Program | - | Water supply and hygiene education at <br> community level |

Source: WB and UNICEF websites

## 2-3 Macroeconomic and Fiscal Analysis

## 2-3.1 Macroeconomic Conditions

The Turkmenistan economy has been dependent on natural gas and cotton production. After the break up of the Soviet Union, the effects of the declining exports of these two industries, resulted in a serious economic situation. Since the export of gas to Russia restarted in 2000, the economy has been continuing its growth begun after 1998.

The Turkmenistan government uses Aggregate Gross Output (AGO) for official statistics. A country which has a high percentage of primary commodities, like Turkmenistan, tends to have a higher growth rate using AGO, rather than Gross Domestic Product (GDP). Therefore, donors including the International Monetary Fund (IMF) point out that the stated economic growth rate is considerably higher than the reality. Despite the government's officially announced AGO growth rate of about $20 \%$ since 2000, donors estimate the real GDP growth rate to be about 10\% a year on average from 2005 to 2007.

Turkmenistan's economic growth in 2007 was helped by the rise in export prices for natural gas and the expanding of exports. In addition Turkmenistan set a very low price for natural gas to Russia; $\$ 140$ per $1,000 \mathrm{~m}^{3}$. However, after negotiating with Russia’s Gazprom Co., there was an agreement to set the price based on the market price in Europe, and this was expected to be raised to between $\$ 225$ and $\$ 295$ in 2009. However, price negotiations between Ukraine and Gazprom broke down, so Russia stopped the natural gas supply ( $90,000,000 \mathrm{~m}^{3}$ ) to Ukraine from Turkmenistan in 2009.

Turkmenistan announced a diversified gas export policy, exporting to destinations such as Iran and China to reduce the risk of dependency on Russia. This policy also includes a strategy for the diversification of industry by investment in industries such as the chemical, textile, and food-processing industries, using natural gas earnings. Also, domestic investment is positively advanced by a favorable natural gas income, and the construction sector also supports economic growth.

The inflation rate has shown a tendency to increase since 2005, and the consumer price index has expanded by about 10\%. According to the Turkmenistan National Statistical Commission, currency redenomination, executed in January 2009, has shown a negligible effect, and the inflation rate is forecast to be $7 \%$ to $8 \%$ in 2009. The global financial crisis in the latter half of 2008 has not yet had a significant impact, however, the Turkmenistan government has analyzed what impact may have on the country's economy via effects such as influence on the price of resources.

Table 2-13 Macroeconomic Indicators for Turkmenistan (2003-2007)

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal GDP (billion manta) (market price) | 55,709.2 | 64,344.4 | 77,846.7 | 99,020.9 | - |
| GDP share by sectors (basic price) |  |  |  |  |  |
| Agriculture | 20.3 | 19.9 | 20.7 | 20.3 | - |
| Industry | 41.3 | 40.8 | 41.5 | 41.2 | - |
| Service | 38.4 | 39.3 | 37.8 | 38.5 | - |
| Real Growth Rate (\%, 1990=100) |  |  |  |  |  |
| GDP | 3.3 | 5.0 | 9.0 | 9.0 | - |
| Agriculture | -5.7 | 3.2 | 13.8 | 6.5 | - |
| Industry | -0.4 | 3.8 | 11.2 | 8.0 |  |
| Service | 10.5 | 7.5 | 5.0 | 10.9 | - |
| Inflation (\%) |  |  |  |  |  |
| Consumer Price Index | 5.6 | 5.9 | 10.7 | 10.5 | 9.0 |
| Food Price Index | n.a. | n.a | n.a | n.a | n.a |
| GDP deflator | n.a | n.a | n.a | n.a | n.a |

Source: Asian Development Bank, "Key Indicators for Asia and the Pacific 2008"

Since the Turkmenistan government does not officially publish data on their international economy, it is difficult to grasp the real situation. The trade surplus has expanded due to expanding natural gas exports, and the current surplus has also expanded. The trade surplus and current surplus in 2007 were $\$ 5.2$ billion and $\$ 4.5$ billion, respectively. The Turkmenistan government does not announce foreign currency reserves, but they are presumed to have been up to $\$ 8$ billion in 2007. According to the IMF mission in May, 2008, the foreign currency reserve was estimated at the amount of 12 months of gross imports.

In April, 1998, the Turkmenistan government adopted a foreign exchange control system, and fixed the official exchange rate at MANAT 5200/\$1. Since the official exchange rate was quite different from the real economic situation, the exchange rate in the black market fell to MANAT 23,500/\$1 in 2006. The Turkmenistan government tried to improve the situation of dual exchange rates, and reduced the official rate to 6,250MANAT/1\$. In January, 2008, the Turkmenistan government introduced a commercial exchange rate, which was MANAT 19,800/\$1, available at 100 bank exchange counters. In May, 2008, the official exchange rate was unified and reduced to MANAT 14,250/\$1.

It is not clear how the change in the exchange rate has affected the trade balance. Custom duties were reduced by presidential order in August 2008 and this curbed the price increases of daily necessities such as food and clothing.

Table 2-14 Balance of Payment and International Reserves (2003-2007)

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance of Payments (million USD) |  |  |  |  |  |
| Trade Balance | 886.0 | 705.5 | 1,997.1 | 4,597.8 | 5,216.1 |
| Current Balance | 305.0 | 82.2 | 876.9 | 3,347.2 | 4,524.7 |
| Overall Balance | n.a | n.a | n.a | n.a | n.a |
| \% of GDP |  |  |  |  |  |
| Trade Balance | 8.3 | 5.7 | 13.3 | 24.1 | - |
| Current Balance | 2.8 | 0.7 | 5.9 | 17.6 | - |
| Overall Balance | n.a | n.a | n.a | n.a | n.a |
| International Reserves (million USD) |  |  |  |  |  |
| Total | 2,673.0 | 2,714.0 | 3,600.0 | n.a | n.a. |
| Foreign exchange | n.a | n.a | n.a | n.a | n.a |
| Exchange rate (Manat per USD) |  |  |  |  |  |
| Average of period | 5,200.0 | 5,200.0 | 5,200.0 | 5,200.0 | 5,200.0 |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

## 2-3.2 Fiscal Conditions

Because of limited available data and unclear policies, it is difficult to grasp the complete financial condition of Turkmenistan. The annual budget is the responsibility of the Ministry of Economic Development and the Ministry of Finance, who create the Annual Investment Plan. According to the published fiscal revenue and expenditures in 2003-2006, there was a deficit of 781 billion MANAT in 2003, but surpluses since 2004, with the surplus reaching 5.8 trillion MANAT in 2006. Although the surplus reduced in 2007, the GDP in the fiscal surplus improved to $4.3 \%$ from the previous year's $3.9 \%$ in 2008.

Tax revenue comprised over $90 \%$ of the annual revenue for 2006. Among 2.25 billion MANAT of total revenue, 2.11 billion MANAT was tax revenue. Most of the tax revenue was derived from natural gas and oil income. From this, it is clear that Turkmenistan’s finance depends on the natural gas and oil sector. Natural gas and oil income were not included in the government budget, but in the "oil and gas fund" which was outside the framework of the budget. Though this fund was abolished in 2008, these funds were also set into the agriculture and transportation sectors, and this made the budget situation in Turkmenistan more difficult to understand.

For annual expenditure, more than $90 \%$ is current expenditure, and the capital expense from the general treasury fund is less than 10 percent. Except for the fiscal deficit in 2003, current expenditure has been in the range of revenues, however, it is showing a tendency to increase because of the rise in salaries in the public sector and due to the expansion of public investment. In Turkmenistan, public utilities such as electricity, gas, and water are free and in addition, there is a subsidy on 17 items. There is no data for the annual expenditure by sectors, and it is unknown how much budget has been allocated to each sector. Besides the general budget, the "stabilization fund" was established as a source from the budget surplus. This aims to activate and stabilize the national economy, but it is uncertain as to how it is managed.

Table 2-15 Government Finance in Turkmenistan

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Government (billion manta) |  |  |  |  |  |
| Total revenue and grants | n.a. | n.a | n.a | n.a | - |
| Total revenue | 10,716.0 | 14,262.4 | 18,285 | 22,474.0 | - |
| Current revenue | 10,716.0 | 14,262.4 | 18,285 | 22,474.0 | - |
| Tax | 10,222.0 | 13,454.0 | 17,629.0 | 21,085.0 | - |
| Capital receipts | n.a | n.a | n.a | n.a | - |
| Grants* | n.a | n.a | n.a | n.a | - |
| Total expenditure | 11,497.0 | 13,941.0 | 17,565.0 | 16,631.0 | - |
| Current expenditure | 10,811.0 | 13,188.0 | 16,703.0 | 15,665.0 | - |
| Capital expenditure | 686.0 | 754.0 | 862.0 | 966.0 | - |
| Overall budgetary surplus/deficit | -781.0 | 320.0 | 719.0 | 5,843.0 | - |
| Government Finance (million manat) |  |  |  |  |  |
| Domestic borrowing | n.a. | n.a | n.a | n.a | n.a |
| Foreign borrowing | n.a | n.a | n.a | n.a | n.a |
| Use of cash balance | n.a | n.a | n.a | n.a | n.a |
| \% of GDP |  |  |  |  |  |
| Total revenue | 19.2 | 22.2 | 23.5 | 22.7 | - |
| Total expenditure | 20.6 | 21.7 | 22.6 | 16.8 | - |
| Overall budgetary surplus/deficit | -1.4 | 0.5 | 0.9 | 5.9 | - |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

## 2-3.3 Debt Sustainability

The total external debt outstanding for Turkmenistan was 880 million US dollars in 2006. Out of this, the public and publicly-guaranteed external debt amounted to 730 million US dollars. After the disbursement of loans by WB and EBRD in 1997, the government of Turkmenistan had no new loan agreement with donors. Thus the principal payments simply reduce the public debt outstanding. The debt outstanding decreased to $8.9 \%$ as a percentage of the Gross National Income (GNI) in 2006, from $29.5 \%$ in 2003. It is projected that the long-term debt burden will not dramatically increase since the government of Turkmenistan has an interest in the promotion of investment rather than loans for the funding of development projects.

Table 2-16 External Indebtedness of Turkmenistan

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| External debt (million USD) | $1,743.2$ | $1,522.4$ | $1,058.0$ | 880.9 | - |
| Total debt outstanding and disbursed | $1,447.3$ | $1,267.5$ | 911.0 | 729.2 | - |
| Long-term | $1,402.4$ | $1,226.6$ | 877.8 | 725.3 | - |
| Public and publicly guaranteed | 44.9 | 40.9 | 33.1 | 3.9 | - |
| Private non-guaranteed | 295.9 | 254.9 | 147.0 | 151.7 | - |
| Short-term | 0.0 | 0.0 | 0.0 | 0.0 | - |
| Use of IMF credit |  |  |  |  |  |


|  | 2003 | 2004 | 2005 | 2006 | 2007 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Debt service (million USD) |  |  |  |  |  |  |
| Principal repayment on long-term debt | 396.0 | 354.4 | 261.4 | 216.5 | 155.2 |  |
| Interest on long-term debt | 43.1 | 40.8 | 39.1 | 33.2 | 28.3 |  |
| Interest on short-term debt | 9.9 | 9.8 | 6.8 | 5.1 | - |  |
| Debt Indicators (\%) |  |  |  |  |  |  |
| External debt as percent of GNI | 29.5 | 22.6 | 14.0 | 8.9 | - |  |
| Total long-term debt as percentage of total <br> debt | n.a. | n.a. | n.a. | n.a. | n.a |  |
| Debt service as percentage of export of <br> goods and services | n.a. | n.a | n.a | n.a | n.a |  |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

## 2-4 Major Donors' Activities in Turkmenistan

Until recently, the Turkmenistan government was passive in accepting aid from foreign countries under the guise of their "neutrality policy." They did not actively accept loans particularly because of the income from their abundant resources of oil and gas. However, since former president Niyazov died in December, 2006, new president Berdimuhammedow has supported an "open-door policy," and gradually has been accepting aid from foreign countries.

Table 2-17 Official Development Assistance by Donors (Disbursement)

| (Unit: Million USD) |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Donor | Time period |  | 2003 |  | 2004 |  | 2005 |  | 2006 | 2007 |
| Turkey | 2.96 | 18.82 | 14.97 | 17.73 | 19.84 |  |  |  |  |  |
| United States | 6.51 | 6.54 | 9.61 | 3.11 | 0.14 |  |  |  |  |  |
| Japan | 6.8 | 2.22 | 0.13 | 0.62 | -0.54 |  |  |  |  |  |
| EC | 1.9 | 0.29 | 0.97 | 1.78 | 2.47 |  |  |  |  |  |
| UNICEF | 1.01 | 1.06 | 0.88 | 1.1 | 1.58 |  |  |  |  |  |
| UNDP | 0.8 | 0.69 | 1.04 | 1.38 | 1.23 |  |  |  |  |  |
| Germany | 0.97 | 1.18 | 1.16 | 0.75 | 0.79 |  |  |  |  |  |
| UNHCR | 0.69 | 0.96 | 0.97 | 0.85 | 0.24 |  |  |  |  |  |
| France | 0.35 | 0.77 | 0.68 | 0.8 | 0.38 |  |  |  |  |  |
| UNFPA | 0.48 | 0.46 | 0.51 | 0.61 | 0.5 |  |  |  |  |  |
| EBRD | 0.23 | 0.11 | 0.05 | $\cdots$ | $\cdots$ |  |  |  |  |  |
| IDA | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ |  |  |  |  |  |
| IMF (SAF/ESAF/PRGF) | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ |  |  |  |  |  |
| ADB | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ |  |  |  |  |  |

Source: OECF/DAC International Development Statistics and ADB Annual Report 2007.

Major donors, both multilateral and bilateral, in Turkmenistan, provide grant aids to the country while loan projects financed by the donors have been very limited. The largest donors are the UN group, including the United Nations Development Programme (UNDP) and UNICEF, and the United States. Recently, in particular, since 2004, Turkey has been rapidly expanding its
assistance for Central Asian countries, including Turkmenistan. For the last 5 years, Turkey has been the largest donor in Turkmenistan. On the other hand, ADB, which plays a central role in promoting development in other Central Asian countries, has only held a seminar on ADB operational strategy and procedures and has had no project in the country so far. The European Union has interest in expanding their assistance to Turkmenistan, in particular focusing on economic reform, and the transition process to a market economy (including the energy sector), capacity development, the promotion of civil society, and agriculture and rural development.

## 2-4.1 World Bank

The World Bank established a liaison office in Turkmenistan 13 years ago. In the 1990s, three projects were executed with loans from the IBRD. In recent years, two grant-aided training programs have been provided following a request from the Turkmenistan government. Future support is expected to be small-scale and no large-scale loan projects are scheduled. Currently, the World Bank does not prepare specific country assistance strategy for Turkmenistan, and is considering what they can do in cooperation with the U.N.

Table 2-18 World Bank Projects in Turkmenistan
(Unit: million USD)

| Project | Scheme | Approval Date/Status | Amount |
| :--- | :---: | :---: | ---: |
| Urban Transport Project | Loan (IBRD) | $1997 / 5 / 27$ <br> Completed | 34.2 |
| Water Supply \& Sanitation Project | Loan (IBRD) | $1997 / 5 / 27$ <br> Completed | 30.3 |
| Institution Building/ Technical Assistance <br> Project | TA Loan (IBRD) | $1994 / 9 / 15$ <br> Completed | 25 |
| Crop Protection and Veterinary Services | Loan (IBRD) | Dropped (1998) | 15 |
| Farm Restructuring Project | Loan (IBRD) | Dropped (1997) | 30 |
| Health Project | Loan (IBRD) | Dropped (1997) | 9.07 |
| SPN of Statistical Capacity Building TF | Grant | $2008 / 6 / 3$ On-going | 0.39 |
| Avian Influenza Project | Grant | $2007 / 11 / 16$ On-going <br> (To be completed on <br> $2009 / 5 / 31)$ | $0.37+$ <br> $(E C: 1.60)$ |

Source: World Bank website (http://web.worldbank.org/ as of June 2009)

## 2-4.2 European Bank for Reconstruction and Development (EBRD)

The EBRD started providing support to Turkmenistan in 2004, and is now working according to the support strategy approved in 2006.

The EBRD operational priorities in Turkmenistan include:
a. Portfolio monitoring and management of existing investments in Turkmenistan.
b. Expansion of the Trade Facilitation Programme
c. Implementation and development of a micro-finance programme
d. Direct investment in domestic and foreign companies

The EBRD has executed eight projects (121.4 million Euro in total commitment base), however, there have been no new projects since a denim factory in 2001. The new government has promoted an "open-door policy" and the development of private sectors in the economic field, which may enhance the needs of the EBRD. Some projects, including a small and medium-sized enterprise financing program, are expected to be approved in 2009.

Table 2-19 EBRD Projects in Turkmenistan

| Project | Public/Private | Approval <br> Date/Status | Amount |
| :--- | :---: | :---: | ---: |
| Turkmenistan SME Financing <br> Programme | private | $2009 / 6 / 2$ <br> (Planned) | 5 |
| Gap Turkmen 3 | private | $2001 / 12 / 18$ <br> Completed | 10.7 |
| Dragon Oil | private | $1999 / 12 / 14$ <br> Completed | Am (A) <br> 15 (B) |
| Gap Turkmen 2 | private | $1999 / 7 / 20$ <br> Completed | 3 |
| Turkmenbashi Port Development | public | $1997 / 12 / 16$ <br> Completed | 27.5 million ECU |
| Gap Turkmen | private | $1995 / 12$ <br> Completed | 31 |

Source: European Bank for Reconstruction and Development website
(http://www.ebrd.com/projects/psd/country/turkmen.htm as of June 2009)

## 2-4.3 The United Nations (UN)

In Turkmenistan, the United Nations forms a resident coordination system (RSC) with the representatives of UNDP, the United Nations Population Fund (UNFPA), the United Nations High Commission for Refugees (UNHCR), UNICEF, the United Nations Office on Drugs and Crime (UNODC) and representation in the WHO.

Though it is not a formal RSC member, the International Organization for Migration (IOM) and the World Bank are participating in this system also, and are working together with other organizations.
U.N. agencies in Turkmenistan are formulating a "United Nations Development Assistance Framework (UNDAF) 2005-2009" and are in the process of holding conferences for the national development strategy and the Millennium Development Goal (MDGs).
Basically, each organization is fulfilling their mandate on the three fields of the formulation of social policy, basic social services and the environment.

Table 2-20 UNDP Priority Areas and Projects

| Priority areas | Projects |
| :---: | :--- |
| Democratic governments | $-\quad$ Building of Reporting Capacities |
|  | $-\quad$ Cooperation for Enhancement of the Electoral System and Processes |
|  | $-\quad$ Information Sharing for Sustainable Human Development |
|  | $-\quad$ Local Self-Governance Project |


| Priority areas | Projects |
| :---: | :---: |
| Environment and sustainable development | - Capacity Building and On-the-Ground Investment for Sustainable Land Management <br> - Conservation and sustainable use of the globally significant biological diversity in Hazar Nature Reserve on the Caspian Sea Coast <br> Institutional and Human Capacity Building for Better Environmental Governance <br> - Strengthening the Protected Areas System |
| Poverty reduction and Achievement of Millennium Development Goals | - Support for Accounting System Modernization <br> - Social and Economic Integration for the Visually and Hearing Impaired <br> - Support for Gender Mainstreaming in Policymaking <br> - Support for Social Protection System Development <br> - HIV/AIDS Prevention |

Source: UNDP Turkmenistan Office website (http://www.undptkm.org/index.php as of June 2009)

## 2-4.4 The United States Agency for International Development (USAID)

USAID began support for Turkmenistan in 1992, and has contributed more than $\$ 80$ million since then, particularly in the fields of economic growth, human investment, democratic government, market-oriented economic reform, agricultural development, prevention of infectious diseases, vocational training, and development of the civil society.

Table 2-21 Activities of USAID in 2009

| Priority areas | Projects |  |
| :--- | :--- | :--- |
| Economic growth | - | $\begin{array}{l}\text { Strengthening fiscal management } \\ \text { Support for the Russian-language Certified International Professional } \\ \text { Accountant program }\end{array}$ |
|  | - | $\begin{array}{l}\text { Development of Central Asian energy resources } \\ \text { Junior Achievement programs for offering economic education to } \\ \text { secondary-school students }\end{array}$ |
| Investing in people | - | $\begin{array}{l}\text { Establishment and institutionalization of components for health reform } \\ \text { Programs for implementation of TB control strategy and development of } \\ \text { models for treatment of multi-drug resistant TB }\end{array}$ |
|  | $-\begin{array}{l}\text { TB (tuberculosis) control }\end{array}$ |  |
| Assistance for implementation of the national HIV/AIDS strategy |  |  |
| Preparedness to deal with the threat of avian influenza |  |  |$]$

Source: USAID Turkmenistan website (http://centralasia.usaid.gov/ as of June 2009)

## 2-4.5 Turkish International Cooperation and Development Agency (TIKA)

TIKA is a technical co-operation support organization established in Turkey in 1992. Its original purpose was to cooperate with the newly independent "brother countries" after the breakup of the Soviet Union, but today it has expanded its support to African regions such as the Sudan, Ethiopia, and Senegal. Currently, TIKA has 22 program coordination offices in 20 countries. In Turkmenistan, TIKA gave top priority to human development, and also supported economic development through cultural heritage and agriculture technology.

There is a focus on projects such as the restoration of the Sultan Sanjar Tomb and pistachio farming development. In the former case, for restoration of the Tomb, the organization is not only providing technical assistance, but also personnel training in research laboratories through academic exchange between Turkey and Turkmenistan. In the latter case, the aim is to contribute to future job creation and export promotion by making pistachios a major farm product in Turkmenistan. This project started because the government did not recognize the benefits for economic development of the wild pistachio, which grows naturally in Turkmenistan. The project provides training in cultivation techniques, such as tree selection and cultivation methods, to local farmers by specialists from Turkey. There are other projects under consideration, such as a walnut cultivation project and the training of doctors and in medical sector support.

Table 2-22 TIKA Projects in Turkmenistan

| Project | Component |  |
| :--- | :--- | :--- |
| Restoration of the Sultan Sanjar Tomb | $-\quad$Restoration of the Sultan Sanjar Tomb <br>  <br>  <br>  <br> Developing Pistachio Farming <br>  <br> and his Era" |  |
| Developing Poultry Husbandry | - | Transfer experience for pistachio farming <br>  |
| Employment creation |  |  |
| Establishing a Seed Registry and | - | Expand exports |

Source: TIKA, "Central Asia and Caucasus -Projects and Activities-"and the interviews with TIKA staff in Turkmenistan

## 3 Development Needs and Issues in Kyrgyz



Source: Economic Intelligent Unit, "EIU Country Report Kyrgyz Republic", May 2009
Figure 3-1 Map of Kyrgyz

Following the National Poverty Reduction Strategy (NPRS) for 2003-2005, the Government of Kyrgyz formulated the Country Development Strategy 2007-2010 (CDS-1) in 2007. The government further drew up the Country Development Strategy 2009-2011 (CDS-2) by updating CDS-1 in response to recent international circumstances, especially the price hike in energy and food. CDS-2 was approved on February 25, 2009 in the 3rd National Council on strategic development, chaired by the president.

## 3-1 Outline of National Development Plan and Priority Sectors

## 3-1.1 Outline of CDS-1

The planning process of CDS-1 was based on a participatory approach with broad discussion by various stakeholders, including members of parliament, representatives from the private sector and from civil society. The first section CDS-1 dealt with a review of NPRS 2003-2005 which stated that unemployment, reform of the economic structure, the low income levels of vulnerable groups, problems related to children and women, are still the issues to be tackled after the implementation of PRSP. Based on this analysis CDS-1 enumerated 1) the development of economic potential, 2) the eradication of corruption, 3) social development, and 4) the preservation of environment as key sectors. CDS-1 pointed out that social and political stability and the policy environment, such as macroeconomic policy measures, need to be
maintained and adjusted. Table 3-1 shows the social and economic targets of CDS-1 and Table 3-2 shows the key sectors and plans and policies of each sector.

Table 3-1 Growth Rate of Macroeconomic Indicators in 2006-2010 under CDS-1

| Indicators | Targets |
| :--- | ---: |
| Real GDP growth rate | $8 \%-9 \%$ |
| GDP per capita | 872 USD |
| Working efficiency growth rate (USD/person) | 149.9 (2006-2010 total) |
| Real wage growth rate | 173.8 (2006-2010 total) |
| Poverty level | $29.8 \%$ until 2010 |

Source: Kyrgyz Republic, "Country Development Strategy 2007-2010)", p.11, Table 4.2.1

Table 3-2 Development Focus and Priorities

| Sub-sector | Objectives | Programs and Projects |
| :---: | :---: | :---: |
| Development Focus: Economic Potential Enhancement |  |  |
| Enegy | - To achieve financial recovery of the power industry <br> - To create conditions for a balanced and comprehensive development of the power sector and power security of the Republic by 2025 | - Implementation of the program in increasing energy efficiency and saving <br> - Development of a program to reduce consumption of hydrocarbon raw materials and replacement thereof by alternative power sources, rules of access to networks, sales of power generated by alternative power sources, and tariff policy for products thereof, <br> - Completion of denationalization and privatization of the gas supply system, restructuring and development of gas transportation networks with better efficiency of state regulation based on the state programs <br> - Launch and complete privatization of oil and gas industry based on a state program, <br> - Initiate a project for cutting and eventually terminating state support from the republican budget of the coal industry, <br> - Continue development of the project on strengthening procedures of selection of qualified and competent human resources for appointment to board of directors and chief executive positions. |
| Mining | - To create a favorable investment climate for all depths users <br> - To increase income from the mining sector by diversification of production and integration in the world economy <br> - To reduce poverty and migration through creation of additional job opportunities in remote mountainous regions <br> - To enhance transparency of handling revenues from the mining industry | - Preparation of the new version of the Law on depths <br> - Privatization of mining industry objects. <br> - Improvement of geology infrastructure <br> - Development of small deposits <br> - Implementation of the following investment projects: <br> - Prolongation of Kumtor mine operation to 2020 through exploring of additional gold reserves within the Kumtor mining field, <br> - Extension of the operation term of Makmal mine to 2020 due <br> - Exploitation of small deposits with the reserves from 8 to 20 tons (Kuru-Tegerek, Ishtamberdy, Terekkan, Solton-Sary, Togolok, Andash, Kuranjailoo, etc.) <br> - Supply of raw materials to currently operating mining and metallurgy enterprises (JSC Kadamjay Symyanoi Combinat, HRAO) <br> - Development of tin-wolfarm deposits(Trudovoe, Uchkoshkon, Kensu) <br> - Expansion of the list of production of deficit nonmetallic minerals. <br> - Increase by $100 \%$ of extraction of construction materials based on the demand dynamics in the internal market. <br> - Increase of cola extraction up to 1 million tons; oil to 100,000 tons; gas to 50 billion cubic meters. <br> - Expansion of production of mineral water and balaneological treatment. |


| Sub-sector | Objectives | Programs and Projects |
| :---: | :---: | :---: |
| Development of agriculture and processing industry | - Development of agricultural sector through stronger market relations in the areas of production, processing agricultural products and higher income of peasants and farmers with sustaining of healthy environment | - Agirbusiness and marketing project (WB). <br> - Agricultural Strategy Development (ADB). <br> - Project on establishment of unified real estate database, cadastre cartography and creation of the database (WB, 228 million soms, 2008-2010). <br> - Project <Rural Advisory Support Services>. <br> - Rehabilitation of irrigation systems. <br> - Regional Development of Agriculture. <br> - Farm-irrigation system. <br> - Regional development of agriculture. <br> - Agrarian policy conception throughout 2010. <br> - Village development conception. |
| Development of small and medium business | - Provision of sustainable entrepreneurship development by means of creating favorable conditions to enhance stable activities of small and medium business | - Improvement of tax administration (In future, introduction of a principle of taxation based on single tax from turnover). <br> - Improvement of regulation on state control over the business activities, such as remove of duplication of functions and overlapping of controlling organs. <br> - Amendments and addenda to the law of the Kyrgyz Republic on protection of businessmen rights. <br> - Creation of single legislative system determining orders and procedures of state registration and introduction of "single window". <br> - Improvement of license permission system. <br> - Adaption of the new law on "normative and legal acts of the Kyrgyz Republic" to restrict and put in good order rule -making activities of the ministries and agencies. |
| Construction | - Transition to sustainable development <br> - Development of dwelling sphere providing accessibility of dwelling to citizens, and safety and comfortable conditions of living | - Implementation of the State program of mortgage lending consisted of the following three components: <br> - Housing for young teachers and doctors within the frame of "Deposit of young teacher" and "Deposit of young doctor" programs <br> - Setting up of a saving system of mortgage lending <br> - Share building of social dwelling |
| Tourism Development | - Creation of modern competitive tourist complex <br> - Creation of conditions for sustainable tourism development <br> - Establishment of stable environment and socially oriented highly profitable tourist industry to generate stable cash income and to create job opportunities, and to re-enter traditional tourist service markets in Russia and in Central Asia | - Submission of the draft law to the Parliament in order to establish free economic zones for tourism. <br> - Submission of the draft law to the Parliament in order to amend the Tax Code regarding the section on VAT. <br> - Adoption of resolution by the government on introduction of a unified state system of classification for collective accommodation means to guarantee proper level of hotel service quality for the tourists <br> - Preparation of a new General scheme (Master plan) for tourism development in the Kyrgyz Republic through 2009-2020 |
| Transport infrastructure | - Improvement of basic network of roads with higher working standards to minimize transportation costs for goods and service producers in order to ensure access to regional and local markets, labor and social services. | - Rehabilitation or reconstruction of international roads <br> - Osh - Sarytash - Irkeshtam (253km) <br> - Suusamyr - Talas - Taraz (199km) <br> - Bishkek - Naryn - Torugart (533km) <br> - Osh - Batken - Isfana (385km) <br> - Sarytash - Karamyk Jergital (142km) <br> - Surface treatment of roads with the length up to 1000 km annually. <br> - Capital rehabilitation of internal network of automobile roads and capital and routine repair, installation of asphalt concrete pavement, reconstruction and repair of bridges and road facilities of domestic road network |
| Communication and Information | - Building of modern high-tech and competitive National data transfer network based on advanced innovative technologies application which provide guaranteed and equal access of the population to informational resources of the country and integration of the National network in to the world information space | - Construction of the main fiber-optic communication. <br> - Rural communication development project (CDMA-450, ViMAX+VSAT) <br> - RIU RLTR infrastructure modernization |
| Innovation technologies development | - Creation of economic conditions for production of competitive innovation items | - |


| Sub-sector | Objectives | Programs and Projects |
| :---: | :---: | :---: |
| Political <br> Reform | - Creation of a system of checks and balances including robust procedures of accountability for powers | - Adoption of the new Constitution of the Kyrgyz Republic in January 2007 <br> - Appointment of the new Prime Minister <br> - Adoption of the new structure of the Government <br> - Further actions will be determined |
| Deregulation of economy | - Reduction of regulative and controlling functions of the state in business <br> - Creation of favorable environment for the growth of corruption | - Implementation of recommendations and proposals prepared by the Investment Council under the President for business environment and investment climate |
| Reform of public administration | - Re-orientation of tasks and functions of the state organs and institutions form direct intervention and participation in market activity to market regulation and provision of public well-being | - Reorganization of public administration organs based on functional analysis |
| Capacity building of public and municipal servants | - Establishment of a system effectively performing functions and responsibilities of state in front of the citizens. | - Development of the strategy of public administration system reform <br> - Introduction of competition selection for public posts <br> - Working program on training and retraining of personnel, rotation and income declaration <br> - Development of measures to protect public servants from arbitrariness of leadership <br> - Preparation of proposal regarding remuneration |
| Legal reform | - Creation of effective guarantees of the constitutional rights and freedoms, improvement of business and investment climate, as well as to control administrative despotism of the state organs | - |
| Education essential to the society | - Establishment of self-developing, effective system of education to facilitate economic growth and sustainable development of the country in the environment of quickly changing world <br> - Improvement of human resources <br> - Provision of personnel who are able to work in the reality of the new century | - Project "Education-2"(2005-2010) supported by ADB, 15.5 million USD <br> - Project "Vocational education (2006-2009) supported by ADB, 10 million USD <br> - Project "Access to basic education for disabled children supported by ADB, 1 million USD <br> - Project "Development of early childhood" (2003-2009), supported by ADB, 10.5 million USD <br> - Project "Rural education" (2007-2010) supported by WB, 15 million USD <br> - Project "Improvement of quality and access to education" (2007-2010) supported by UNDP, 2 million USD |
| Accessible and quality health care | - Improvement of health condition of the population by means of establishment of responsible, effective, complex and integrated system of health care | - The National healthcare reform program "Manas taalimi" (2006-2010) |
| Labor and effective system of social protection and social insurance | - Improvement of life quality of the population <br> - Provision of social guarantees and support for socially vulnerable citizens | - |
| Labor market and optimization of migration processes | - Formation and ensuring of social and economic, legal and legislative, international agreement and ideological background and conditions for their dynamic development and overcoming negative consequences to achieve accelerated employment rate of the population, sufficient controllability of migration processes on directions, scales and composition, contributing to sustainable economic growth, enhancing of state safety and providing of adequate conditions to observe rights of migrant | - |
| Culture | - Broadening of population participation in cultural life | - Program of development culture and art in rural area 2010 <br> - Projects prepared under the partnership participation of international banks and foundations |


| Sub-sector | Objectives | Programs and Projects |
| :---: | :---: | :---: |
| Environmental Safety | - Provision of environmental safety as a basis of sustainable development of the republic | - Preparation of a strategic document of "Concept of environmental safety" <br> - Environmental code <br> - Concept of Kyrgyz Republic transfer to sustainable development <br> - National strategy of biodiversity preservation <br> - Concept of forestry sector development till 2025, National forestry program 2005-2015, National action plan on forestry development 2006-2010 <br> - National framework program on sustainable management of land resources till 2016 <br> - National plan on implementation of Stockholm Convention on resistant organic pollutants |
| Disaster control | - Provision of complex safety of the population and territory in the case of natural disasters and catastrophes | - State system of civil protection till 2010 <br> - Establishment of State rescue service <br> - Improvement and development of control centers single network for crisis situations using modern information technologies <br> - Enhancement of quality of inspectorates and control of the supervision over industrial safety and mining super vision <br> - Implementation of preventive, emergency-reconstruction and design and survey works <br> - Enhancement of monitoring of environmental condition <br> - Project "Establishment of complex monitoring and forecasting system for landslide processes based on GIS technologies and remote reconnaissance <br> - Project " Establishment of complex for monitoring network to observe hydrogeological and seismic movements <br> - Project "Provision of seismic safety for citizens and the infrastructure of settlement" <br> - Project "Protection of settlements and territories form waterlogging" in Chui valley <br> - Project "Protection of the population and territory from danger of high altitude lake, dams and artificial reservoirs and dams of tailings <br> - Project "Landslide safety for citizens and settlement infrastructure" (2006-2010) <br> - Project "Establishment of new socially oriented, economically sustainable protection and safety system for the population and territory in the emergency case" <br> - Project "Rehablitation of tailings, Sovetsky (Kan) village" <br> - Project "Rehabilitation of dump complex, Shkaftar village" <br> - Project "Rehabilitation of tailings, Sumsar village" <br> - Project "Rehabilitation of Buurda tailings" <br> - Project "Rehabilitation of tailings, Kadji-Sai" <br> - Project "Rehabilitation and recultivation of tailings with uranium wastes and dumps of low radioactive rocks, Mailusuu town" |

Source: Kyrgyz Republic, "Country Development Strategy (2007-2010)"

## 3-1.2 Challenges in Implementation of CDS-1

While CDS-1 addresses 4 major sectors as stated above, their sub-sectors cover various areas and have contents in every direction as shown in Table 3-2. In each sub-sector there are descriptions of the analysis of the present situation, purpose, policies and measures to be taken, candidate projects and programs, fund requirements, etc. Because of several inconsistencies among the items, it is necessary to conduct sector analysis and needs assessment before the actual formation of projects. Specific problems to be solved are as follows:

## - Disjointed Plans

Although CDS-1 was prepared in a participatory manner, the sector programs were simply
gathered without coordination among the parties concerned. Therefore there is no clear description of the relevance between the sectors or of the magnitude of contribution of each program to the development target. In the energy sector, for example, CDS-1 aims at balanced and comprehensive development not only depending on hydroelectric power but also by utilizing thermal power (coal) or renewable energy. CDS-1 does not describe the relation between thermal power and coal mining development listed in the mining sector, nor the target figure of how much coal need to be mined.

## - Insufficient Reasoning

CDS-1 sets out the present situation, issues, priorities, purposes, tasks, policies, countermeasures, programs/projects, financial plans, etc. of each sector. The priorities and purposes are not necessarily aimed at solving problems, and also the tasks, policies, countermeasures and projects/programs are not logically described for the sake of the solution of problems. There are repetitions or irrelevant descriptions. To give an example, some sectors, such as judicial reform, do not have any concrete projects prepared. In the energy sector there is inconsistency between the proposed projects and the projects which have allocation of funds. In the mining sector the projects which need investment are described concretely but reforms to be tackled by the government are not specifically set out. The projects of donors are simply enumerated as implementation programs in the agriculture sector.

## Shortage of Funds for Projects

While the total funds necessary for projects to be implemented in CDS-1 are 8,745million US dollars, available funds to be allocated by the Government of Kyrgyz are approximately 2.5 million US dollars which covers less than $30 \%$ of the total funds. The Government of Kyrgyz will fill the gap of 6.2 million US dollars with support from donors and private investment.

## - Donors' View of CDS-1

According to the Joint Country Support Strategy (JCSS) drawn up by 5 donors, the underlined goals of CDS-1 regarding the improvement of working efficiency, competitiveness and governance as development vision and priority issues are regarded as appropriate on the one hand. The donors, on the other hand, consider part of the goals to be too ambitious and state that there are some parts in CDS-1 where explanation is necessary. JCSS also points out, as a lesson learned from implementation of the past PRSP, that the most effective intervention is basic reform at such a time as when human resources have not yet been developed well. JCSS further indicates that at the time of the selection of related sectors and support programs for reform, implementation needs to be selective in order not to lay a burden on the government. In addition, the arrangement of project implementation systems such as the setup of Project Implementation Unit (PIU) should be studied and agreed with the government in advance. JCSS indicated the issues for implementing the CDS-1 (Table 3-3).

Table 3-3 Challenges in Implementation of CDS- 1

| Four Pillars | Issues indicated by JSCC |
| :--- | :--- |
| Growth-oriented economic <br> development | - There remains concern to implement policies and measures chosen due <br> to lack of a legal framework, political consensus on private sector <br> participation <br> • The desired investment levels are too high at 3.5 US million dollars for <br> the energy sector alone, and the country would be extremely fortunate to <br> mobilize perhaps a tenth of such an amount. |


| Four Pillars | Issues indicated by JSCC |
| :--- | :--- |
|  | - Although irrigation is a critical input for profitable and market-oriented <br> agricultural production, it is addressed very briefly in the CDS-1. <br> - Specific proposals in the CDS-1 bear no apparent relevance to its <br> underlying goals and to not take into account the institutional <br> weaknesses and lack of the resources needed to implement them. |
| Improving the business <br> environment, governance <br> and transparency in public <br> administration | - The government has conducted horizontal functional reviews of all <br> ministries and agencies in the past with some support from aid agencies, <br> but failed the most critical recommendations of the reviews. |
| Human resource <br> development | -It is necessary to translate human and social development priorities <br> rather broad policy statements into a set of time-bound actions with <br> adequate allocation of resources in the annual budgets, with a clear and <br> appropriate pro-poor focus. |
| Environmental <br> sustainability and natural <br> resource management | - The CDS-1 indentifies many issues including the risks of natural <br> disasters form earthquakes, mudslides and avalanches and threats to <br> health from uranium tailing and other hazardous waste, and prioritizes <br> the appropriate management of natural resources. However, the links <br> to economic and social development are less well-articulated. |

Source: "Joint Country Support Strategy (2007-2010)"

## 3-1.3 Outline of CDS-2

At the time of preparation of CDS-2, the Ministry of Economic Development and Trade coordinated to formulate a working committee which consisted of ministers, heads of municipalities, experts recommended by the World Bank and others.

CDS-2 focuses on 1) improvement of quality of economic development, 2) betterment of quality of governance, 3) improvement of quality of life and 4) improvement of quality of environment, as four strategic targets which do not differ from the direction of CDS-1. One of the features of CDS-2 is the downgrading of the social and economic target figures from CDS-1 due to the indirect influence of the world economic crisis in employment caused by the return of overseas workers and unstable fuel and food prices which adversely affect the social and economic environment in Kyrgyz, together with the incomplete performance of system reform. The social and economic targets of CDS-2 at present are as follows:

Table 3-4 Social and economic target of CDS-2

| Indicators | Targets |
| :--- | ---: |
| Real GDP growth rate | $5.6 \%$ |
| Inflation rate | Less than $10 \%$ |
| Growth of labor productivity (US dollar/person) | 104.8 (Total in 2009-2011) |
| Rear income growth rate | $4.6 \%$ |
| Extension of average life expectancy | From 67 years old to 70 years old |

Source: Kyrgyz Republic, "Country Development Strategy for 2009-2011", (2009)

At the same time, the Ministry of Finance has created a budget framework for 2009-2011 which reflects the priority sectors of CDS-2. The budget framework of 2009-2011 has appropriated necessary funds in a moderate way compared to CDS-1. Total funds necessary for the
implementation of all projects proposed in CDS－2 are 289.4 billion som．The financial gap is 95.5 billion som．

Table 3－5 Socio－economic Goals of CDS－2

| Development Strategy | Required Amount | National Budget <br> and donors＇fund | Financial Gap |
| :--- | ---: | ---: | ---: |
| 1．Improving the quality of <br> economic growth | 163.2 | 83.3 | 79.9 |
| 2．Growth in the quality of <br> governance | 0.353 | 0.095 | 0.258 |
| 3．Improving the quality of life of <br> the country＇s population | 114.6 | 106.2 | 8.4 |
| 4．Improving the quality of <br> environment | 8.2 | 2.7 | 5.5 |
| Total | $289.4(286.353)$ | $(192.295)$ | 95.5 （94．068） |
| Other | 59.3 | 48.3 <br> （National Budget） <br> 10.9 | 0 |

Source：Kyrgyz Republic，＂Country Development Strategy for 2009－2011＂， 2009
Note：Numbers shown in parentheses is the aggregated amount of required resources mentioned in each priority sector in CDS－2．However，those numbers are not necessarily consistent with the total amount required mentioned in CDS－2．

## 3－2 Analysis of Major Sectors

## 3－2．1 Power

## －Current Conditions

According to the report on power and water resources in the Central Asian region issued in February 2009，the installed capacity totals $3,709 \mathrm{MW}$ ，of which hydro power accounts for 2，950MW or $80 \%$ ．The installed capacity of hydro power in Kyrgyzstan accounts for more than $30 \%$ of the total installed capacity（ $8,915 \mathrm{MW}$ ）of the 4 countries in Central Asia（Kyrgyz Public，Tajikistan，Uzbekistan，and south of Kazakhstan）．

Annual power generation in Kyrgyzstan is $14,944 \mathrm{GWh}$ and power consumption is $15,331 \mathrm{GWh}$ ．

Table 3－6 Recent Development of Power Generation

| Installed Capacity（MW） | 3,709 |
| :--- | ---: |
| Hydropower（MW） | 2,950 |
| Thermal power（MW） | 759 |
| Power Generation（GWh） | 14,944 |
| Hydropower（GWh） | 13,942 |
| Thermal power（GWh） | 1,002 |
| Power Generation Capacity（MW） | 3,493 |
| Peak demand（MW） | 2,726 |
| Power Consumption（GWh） | 15,331 |

Source：JICA and MOFA，＂中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書＂（2009），p．3－4，Table 3－1

There are 6 hydropower plants in Kyrgyzstan，located along the Naryn river，a tributary of Syr Darya river．The largest hydropower plant in Kyrgyzstan is the Toktogul hydropower plant， which has an installed capacity of 1，200MW．All the hydropower plants except the Shamaldysay plant were constructed under the Soviet regime．In addition to the main hydropower plants listed hereunder，there are small scale hydropower stations which have an installed capacity of 42MW and an annual power generation of 125 million kWh．Kyrgyzstan has only 2 thermal power plants，Bishkek and Osh，which were constructed in the 1960＇s under the Soviet regime．They are obsolete plants．

Table 3－7 Outline of Major Power Plants

| Hydro／Thermal | Name of Plant | Installed <br> $(\mathrm{MW})$ | Generation <br> $(\mathrm{GWh})$ | Fuel Type | Operation |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Hydro <br> power | Uch－Korgon HPP | 180 | 0.75 | - | 1962 |
|  | Toktogul HPP | 1200 | 4.1 | - | 1975 |
|  | At－Bashyn HPP | 40 | 0.12 | - | 1982 |
|  | Kurpsay HPP | 800 | 2.6 | - | 1982 |
|  | Tashkomur HPP | 450 | 1.5 | - | 1987 |
|  | Shamaldysay HPP | 240 | 0.91 | - | 1995 |
| Thermal <br> power | Bishkek CHP | 674 | - | Coal | 1961 |
|  | Osh CHP | 50 | - | Gas／HeavyOil | 1966 |

Source：Data of Ministry of Energy and JICA and MOFA，＂中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書＂，（2009），p．3－6，Table3－3

According to data of the Kyrgyz National Statistics Committee，total power generation peaked in 2004，then decreased，but increased again in 2007．Power generation by hydropower fluctuates depending on the quantity of water．Thermal power makes up the deficit．

Table 3－8 Power Generation

| （Unit：Million kWh） |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Total Power Generation | 2003 |  |  | 2004 | 2005 |
| 2006 | 2007 |  |  |  |  |
| Hydropower | 14,021 | 15,141 | 14,891 | 14,523 | 14,830 |
| Thermal power | 13,004 | 14,094 | 13,980 | 13,653 | 14,004 |

Source：National Statistical Committee of Kyrgyz Republic

The figure below shows the change in power demand and supply in Kyrgyzstan．Until 2005 the supply exceeded demand constantly and the difference was exported to Uzbekistan． Recently Kyrgyzstan can export power to Afghanistan through the power network in Central Asia．However，the quantity of water in the Toktogul reservoir，which is the largest source of hydropower in Kyrgyzstan，decreased in 2008 to nearly its lowest level because water discharge increased to meet the increased power demand in the winter season of 2007－2008 while water inflow into the reservoir also decreased in 2008．Water discharge also increased in the severe winter of 2008－2009 which has lowered the water level and led to a decrease in power generation．This serious problem requires the development of new hydropower plants．


Source：JICA and MOFA，＂中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書＂，（2009），p．3－2，Figure 3－1

Figure 3－2 Change of Power Demand and Supply（1992－2005）

The power industry in Kyrgyzstan accounts for 5\％of GDP and 16\％of industry output． Power consumption per capita was $2,379 \mathrm{kWh}$ which was the lowest among the 5 Central Asian countries．Power consumption is composed of housing（51\％），industry and business（33\％）， government sector（ $15 \%$ ）and agriculture（ $1 \%$ ）．The power tariff was $0.62 \mathrm{som} / \mathrm{kWh}$（ca． 1.4 cents）in 2003 and was raised to 0.63 som（ca． 1.6 cents）in 2006，and to $2.3 \sim 2.6$ cents $/ \mathrm{kWh}$ in June 2008.

Table 3－9 Change in Power Tariff

|  |  |  |  | （Unit：som／kWh） |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ |  |
| 0.62 | 0.62 | 0.62 | 0.63 | 0.63 | $0.84-0.95$ |  |

Source：National Statistical Committee of Kyrgyz Republic and the authorities

Power export from Kyrgyzstan to the Central Asian Region uses the regional transmission network constructed in the Soviet period．The transmission line from Kyrgyzstan connects Uzbekistan and Kazakhstan but this does not meet the present situation after independence． New transmission lines need to be constructed in order to export power economically to surrounding countries．

Table 3－10 Outline of Central Asian Power System（CAPS）

| Transmission Line | Point 1 | Point 2 | Voltage <br> $(\mathrm{kV})$ | Total Length <br> $(\mathrm{km})$ | Capacity <br> $(\mathrm{MVA})$ |
| :---: | :--- | :--- | :---: | :---: | :---: |
| Uzbekistan－Kyrgyzstan |  |  |  |  |  |
| L－504 | Lochin SS | Toktogul HPP | 500 | 178 | 2,000 |
| L－Kr－U | Yulduz SS | Kristall SS | 220 | 62 | 314 |
| L－Kr－S | Sardor SS | Kristall SS | 220 | 69.3 | 314 |
| L－Kr－K | Kyzyl－Ravat SS | Kristall SS | 220 | 28.1 | 524 |


| Transmission Line | Point 1 | Point 2 | Voltage <br> $(\mathrm{kV})$ | Total Length <br> $(\mathrm{km})$ | Capacity <br> $(\mathrm{MVA})$ |
| :---: | :--- | :--- | :---: | :---: | :---: |
| Kazakhstan－Kyrgyzstan |  |  |  |  |  |
| L－514 | Almaty SS | Bishkek SS | 500 | 298.6 | 1,897 |
| L－515 | Djambul SS | Bishkek SS | 500 | 210.8 | 2,143 |
| L－D－F | Djambul TPP | Bishkek SS | 220 | 178.4 | 263 |
| L－A－F | Almaty SS | Glavnaia SS | 220 | 198.7 | 263 |
| L－G－Ch | Shu SS | Glavnaia SS | 220 | 173.8 | 263 |
| L－B－Z | Zapadnaiy SS | Bistrovka SS | 220 | 80 | 263 |

Source：JICA and MOFA，＂中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書＂，（2009），p．3－7，Table3－4

The power system in Kyrgyzstan was reorganized in 2001 and separated into 1 power company， 1 transmission company and 4 distribution companies．The State Energy Agency is responsible for the overall supervision and the Department of Fuel and Energy Complex under the direct control of the Prime Minister is in charge of the policy making of the power sector． （See Figure 3－3）${ }^{17}$


Source：World Bank，＂Central Asia Regional Electricity Export Potential Study＂，（2004）
Figure 3－3 Structure of Power Supply Industries in Kyrgyzstan

## －Development Issues and Policies

The Government of Kyrgyz has a policy to shift energy consumption from fossil fuels，which are dependent on imports，to hydropower at lower price．This has promoted electric heating and increased power demand．

[^18]The water level of the Toktogul reservoir，which accounts for $90 \%$ of the power source in Kyrgyzstan，lowered in 2007 because power consumption for heating increased more than its yearly rate due to the severe winter，and the water level did not return to its previous level，even in the summer of 2008．This situation caused difficulties in assuring the power generation necessary for the winter of 2008．In order to avoid an energy crisis，generation by 2 thermal power plants making use of imported oil，was necessary for the supply of energy for heating and power imports were also necessary．The Government of Kyrgyz took measures to save energy consumption such as lowering voltage，brownout，and temporary closure of schools and government buildings so that the water quantity could be maintained．

In order to increase power supply，development of abundant water resources is the issue to be tackled．Kyrgyzstan has potential water power of $163,000 \mathrm{GWh}$ but the volume presently developed is only $9 \%$ and $149,058 \mathrm{GWh}$ remains unused．The priority hydropower projects are Kambarata I（1，900MW）and Kambarata II（240MW）which are located in the upper reaches of the Toktogul reservoir and it is planned that these will be implemented with the assistance of Russia，Kazakhstan and China．


Source：JICA and MOFA，＂中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書＂，（2009），p．1－4，Figure1－1

Figure 3－4 Toktogul Reservoir site
The power sector has problems on the management side as well．Lack of transparency has caused a deficit of 2．4billion som and makes the power business unprofitable．In addition power facilities have become obsolete and have deteriorated．This has made the power supply unreliable and has increased blackouts year by year．While the power tariff was raised nearly to the level necessary to cover operation costs，the uncollected amount due，as of January 2008， was 3.3 billion som which means that $72 \%$ of people have not paid their bills．

Old thermal power plants and obsolete district central heating systems have caused a fall in output and a serious loss of energy. District central heating systems are operated in Bishkek ( $85 \%$ of households in the city), Osh (35-40\%), Kysyl-Kyya (60\%) and Kara-Kol (26\%) only. In other areas heating is operated by about 3,000 electric boilers. The heat value of the electric boilers is $4,200 \mathrm{G}$ calories/hour which is equivalent to 3.5 times that of Bishkek thermal power plant. Such power demand for heating leads to an increase in the import of fossil fuel as well as in power consumption in the winter season. It is, therefore, necessary to develop an efficient heat supply system.

## - Donors'Support

To support the power sector in Kyrgyzstan, the Power and District Heating Rehabilitation Project was implemented and completed in 1996 with co-financing from the ADB, the World Bank, the Swiss, the Denmark International Development Agency (DANIDA) and the Nordic Development Fund (NDF). EBRD also supported the Taras Transmission Network Improvement Project which was completed in 1995.

In recent years, the World Bank approved the Energy Emergency Assistance Project in November 2008. The Government of Kyrgyz requested urgent support to the World Bank as a serious power shortage was expected due to the shortage of water in the Toktogul reservoir. This project was planed for the purpose of supporting the implementation of the Energy Emergency Mitigation Action Plan (EEMAP) by the Government of Kyrgyz and to improve energy security in Kyrgyzstan. In detail, the following components are included in the project.
> Improvement of the thermal and heat energy supply system within the shortest possible schedule
$>$ Start of action to prepare for the winter seasons of the coming 2 years, anticipating a situation in which energy demand exceeds supply for some time
> To make mid and long term action plans toward the improvement of national energy security

As for the reinforcement of hydropower capacity, Russia, China and Kazakhstan are planning to support the construction of the Kambarata hydro power plant (I and II) with 2,240MW in total.

In addition CASA 1000 projects, which will promote power export from Central Asia to South Asia, are in progress. One such project, now being planned, is the transmission line through which power from Kyrgyz will be exported to Pakistan and Afghanistan via Tajikistan. International financing institutions such as ADB, the World Bank, IFC, IsDB and EBRD support CASA 1000 projects.

According to the report on regional cooperation regarding power and water resources in Central Asia, the construction of the transmission line for power export between Kyrgyzstan and Tajikistan has started to connect between Kambarata in Kyrgyzstan and Dushanbe in Tajikistan with 500 kV . The construction between Kambarata and Khojend is under preparation, and the section between Khojend and Dushanbe, constructed with a Chinese loan, will be completed in September 2009.

Table 3－11 Main Projects Financed by Donors

| Donor | Name of Project | Approval | Outline of Project |
| :--- | :--- | :---: | :--- |
| ADB <br> WB <br> Swiss <br> DANIDA <br> NDF | Power and District Heating <br> Rehabilitation Project | 1996 <br> （completed） | Promotion of efficient power and heat <br> energy supply system，reduction of <br> environmental burden and rehabilitation of <br> existing system |
| EBRD <br> Swiss <br> ECTaCis | Talas Transmission Network <br> Improvement Project | 1995 <br> （completed） | Rehabilitation of transmission and <br> distribution network in the Talas area |
| WB | Energy Emergency Assistance <br> Project | 2008 <br> （on－going） | Improvement of thermal and heat energy <br> supply system，Action to prepare for power <br> demand in winter for the next two years， <br> Preparation of mid and long term action <br> plan |
| Russia <br> China <br> Kazakhstan | Construction of Kambarata <br> HPP I \＆II | plan | Construction of hydropower plant with total <br> of 2，140MW |
| PPIAF <br> （ADB，WB， <br> IFC，IsDB， <br> EBRD） | CASA 1000 Project | plan | Kyrgyzstan－Tajikistan－Afghanistan－Pakistan <br> Transmission Line Construction Project |
| China | Kambarata－Dushanbe500kV <br> Transmission Line <br> Construction Project | 2009 <br> （schedule） | Kohojend－Dushanbe will be completed in <br> September 2009 |

Source：Donors’ websites and JICA and MOFA，＂中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書＂，（2009）

## 3－2．2 Transport

## －Current Conditions

Since Kyrgyz is an inland country，it heavily depends on land transport，in particular，road and railway transport．The total freight turnover in 2007 was 2,014 million ton／km．Road transport accounted for about $45 \%$ of the total freight turnover，at 900 million ton $/ \mathrm{km}$ ．In the second place，the railway transport accounted for $42 \%$ of the total，or 854 million ton $/ \mathrm{km}$ ． During the period between 2003 and 2007，road transport increased by $13 \%$ ，which is below the growth rate of the total freight turnover of $20 \%$ ．On the other hand，railway transport expanded by more than $50 \%$ ．However，the railway transport in 2007 accounted for only about $32 \%$ of the volume in 1990，before independence from the former Soviet Union．

Water transport accounts for less than $1 \%$ of the total freight turnover because water transport is used for only small cargo in Lake Issik－Kul．While the total freight turnover has been increasing，air transport has not changed much：the freight turnover of air transport is 44.5 million ton $/ \mathrm{km}$ ，which accounts for only $2 \%$ in total．

Table 3-12 Freight Turnover

|  |  |  |  | (Unit: million $\mathrm{t} / \mathrm{km}$ ) |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Transport Mode | 2003 | 2004 | 2005 |  | 2006 |  | 2007 |
| Total | $\mathbf{1 , 6 8 6 . 5}$ | $\mathbf{2 , 0 6 7 . 5}$ | $\mathbf{1 , 8 4 4 . 7}$ | $\mathbf{1 , 8 2 5 . 8}$ | $\mathbf{2 , 0 1 3 . 7}$ |  |  |
| Railway | 561.7 | 714.9 | 661.8 | 751.7 | 853.7 |  |  |
| Truck | 797.2 | 847.4 | 821.2 | 819.0 | 900.0 |  |  |
| Water | 7.4 | 6.3 | 4.9 | 6.3 | 4.8 |  |  |
| Air | 42.8 | 45.5 | 42.4 | 34.2 | 44.5 |  |  |

Source: National Statistical Committee of the Kyrgyz Republic

The revenue of cargo transport increased significantly from 2003 to 2007, by 2.6 times. In total, the cargo transport companies earned more than 2,600 million soms in 2007 . While revenue of water and air transport remains at almost the same level, revenue of railway and road transport has grown considerably. The revenue of railway transport increased 3.8 times from 270 million soms in 2004 to 1,000 million soms in 2007. Also, the revenue of road transport expanded from 760 million soms to 1,590 million soms, 2 times for the same period. Comparing the share of revenues by transport mode, road transport has the largest share of the total transport revenue at approximately $60 \%$. In second place, railway transport accounts for 40\%.

Table 3-13 Revenues of Transport Companies by Mode of Transport

|  | (Unit: million soms) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Transport Mode | 2003 | 2004 | 2005 |  | 2006 |  | 2007 |
| Total | $\mathbf{1 , 0 6 8 . 5}$ | $\mathbf{1 , 3 7 8 . 6}$ | $\mathbf{1 , 4 4 9 . 0}$ | $\mathbf{2 , 1 3 1 . 6}$ | $\mathbf{2 , 6 5 7 . 1}$ |  |  |
| Railway | 272.7 | 513.3 | 457.6 | 810.9 | $1,042.9$ |  |  |
| Truck | 761.9 | 836.1 | 970.0 | $1,256.4$ | $1,587.3$ |  |  |
| Water | 3.7 | 3.9 | 3.3 | 4.8 | 4.1 |  |  |
| Air | 30.2 | 25.3 | 18.1 | 59.5 | 22.8 |  |  |

Source: National Statistical Committee of the Kyrgyz Republic

Passenger transport also doubled from 2,760 million soms in 2003 to 5,410 million soms in 2007. Taxi revenue showed the highest growth: taxis earned 1,670 million soms in 2007, which was an increase of 3.5 times for the same period. This is because taxis have become the major mode of transport among urban people while the operation of trolley-buses, which used to be the main passenger transport mode for urban areas, faces financial difficulties. Revenues of buses also expanded twice from 870 million soms to 1,730 million soms. Bus has become an important passenger transport mode not only for urban transport but also as interregional passenger transport.

Table 3-14 Revenues of Passenger Transport

|  |  |  |  | (Unit: million soms) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Transport Mode | 2003 | 2004 | 2005 | 2006 | 2007 |
| Total | 2,762.5 | 3,384.4 | 3,805.7 | 3,961.5 | 5,412.6 |
| Railway | 261 | 285.4 | 299.1 | 330.9 | 432.2 |
| Bus | 866.9 | 1,114.3 | 1,303.8 | 1,413.1 | 1,734.5 |
| Trolley Bus | 71.7 | 78.1 | 88.5 | 68.0 | 63.0 |
| Taxi | 470.7 | 545.3 | 780.7 | 1,039.6 | 1,670.8 |
| Air | 1,092.2 | 1,361.3 | 1,333.6 | 1,109.9 | 1,512.1 |

Source: National Statistical Committee of the Kyrgyz Republic

## 【Current Development of Roads】

As of 2008, the total length of roads in Kyrgyz is $34,000 \mathrm{~km}: 4,136 \mathrm{~km}$ of international roads, $5,678 \mathrm{~km}$ of national roads and the rest accounting for local roads. In the country, paved roads account for only $20 \%$ of the total length of roads. About $80 \%$ of the roads are unpaved, including soil pavement of more than $1,600 \mathrm{~km}$.

International and national roads and some local roads belong to the Ministry of Transport and Communication (MTC). However, since the Ministry cannot allocate sufficient budget for maintenance, municipal governments maintain a part of these major roads. Local roads are developed and maintained by villages or the private sector. While the total length of $18,100 \mathrm{~km}$ belongs to MTC, the remaining $15,190 \mathrm{~km}$ belongs to other entities, including local governments and the private sector.

Table 3-15 Recent Development of Roads in Kyrgyz


[^19]【Current Development of Railway】
The total length of railways in the country is 426.6 km . There are two separate lines which were constructed at the time of the Soviet Union: The South Line and the North Line. The South and North Lines connect Kyrgyz to Russia through Uzbekistan or Kazakhstan, respectively. Both lines are branches of the Trans-Asian Railway Corridor. Although the railway infrastructure is already obsolete, it can cope with the current transport volume, at present.

Table 3-16 Railway Infrastructures

| Line | Length | Route |
| :--- | :---: | :--- |
| South Line (via Uzbekistan) | 323.4 km | Osh-Jalala-Abad-Kok-Yangak |
| North Line (via Kazakhstan) | 101.2 km | Balykchy-Bishkek-Lugovoe (Kazakhstan) |

Source: International Business Council website http://eng.ibc.kg/about_IBC/mission (as of June 2009)

## - Development Issues and Policies

Kyrgyz has constraints against economic development, including the characteristics of an inland country a limited population size of 5.4 million. Therefore, the development and enhancement of transport connecting with neighboring countries is one of the development priories for economic development through the expansion of international trade.

In particular, it is crucial for Kyrgyz to rehabilitate roads and railway to Kazakhstan, which is one of the major trade partners for the country. Recently, it has become more important to rehabilitate and construct international roads and railways to China since the trade between China and Kyrgyz has been rapidly growing. Also, the list of priority projects includes the development of the road networks connecting Kyrgyz to Turkmenistan, Iran and Turkey through Kazakhstan and Uzbekistan. The railroad line connecting Balykcy - Jalal-Abad-Torugart-China is in the design phase. It is expected that the construction of this railway will reduce the rail distance between Asia and Europe in comparison with the route of the Trans-Siberian Railway and the Druzba (Friendship) Railway in Kazakhstan.

Besides rehabilitation and the construction of an international land transport network, the rehabilitation of the domestic road network is also a critical issue for the country. In particular, the reconstruction of the Osh-Batken-Isfana Highway is urgent. Currently, there is only one route from Batken, where gold mines are located, to Osh, through the Fergana region in Uzbekistan. However, this current route is risky because of the Islamic anti-government forces based in the Fergana region. That is why Kyrgyz needs a highway segment to enable travel between Osh and Batken, where the gold mines are, without crossing into Uzbekistan.

Table 3-17 Priority Projects in the Transport Sector

| Project | Length | Target | Status | Donor |
| :---: | :---: | :---: | :---: | :---: |
| Highway |  |  |  |  |
| Bishkek-Torugart Highway | 500 km | Rehabilitation of Bishkek-Torugart Highway. A part of CAEREC Transport Corridor. | To be completed March, 2012 | Grants by ADB |
| Dhzambyl-Talas-Suur amyr Highway |  | Rehabilitation of highway connecting Chui, Osh and Jalal-Abad, Talas and Dhzambyl, bordering Kazakhstan | Partly completed | The segment of Suuramyr side of 54km financed by IsDB in 2003 |
| Osh-Sary Tash-Irkeshtam Highway | 262km | Rehabilitation of 184 km of the Osh - Sary-Tash segmen, part of the M-41 international highway, and 78 km of the Sary-Tash Chinese border segment, part of the international road connecting Dushanbe Dhzergatal - Karamyk -Sary-Tash - Irkeshtam. | - | - |
| Balyukchy-Karakol-B alykchy-Tup-Kegen Highway | 514km | Rehabilitation of road circling Lake Issyk-Kul, connecting with Balykshy-Bishkek railway, Bishkek-Torugart Highway, and crossing the border with Kazakhstan in the east. | - | - |
| Reconstruction of the Osh-Batken-Isfana Higway | 413km | Reconstruction of Osh-Batken Highway allowing travel between Osh and Batken without crossing into Uzbekistan | - | - |
| Reconstruction of the Almaty-Bishkek-Tash kent Highway | 232km | Reconstruction of highway connecting Kyrgyz ant Kazakhstan, Uzbekistan and Turkmenistan, Iran and Turkey, including multi-lane motorway and a parallel railway. | - | - |
| Railway |  |  |  |  |
| Balykshy-Bishkek-Lu govoe | 322.7 km | electrification of 322.7 km of railway between Lugovoe (Kazakhstan) and Balykchy |  |  |
| Balykshy-Jalal-Abad-Torugart-China |  | Construction of railway which is a part of railway network connecting Asia and Europe. | Design Phase | EU program TACIS provided USD 1 million for the preparation of a feasibility study of the project. |

Source: International Business Council website, http://eng.ibc.kg/about IBC/mission (as of June 2009)


Source: ADB, "Kyrgyz Republic: CAREC Transport Corridor 1 (Bishkek-Torugart Road) Project", (2008)
Figure 3-5 CAREC Transport Corridor in Kyrgyz


Source：JICA＂中央アジア地域貿易促進プロジェクト形成調査（一次調査）報告書＂，（2007）
Figure 3－6 Grand Design of the Asian Highway：Route through Kyrgyz

Although there is a significant need to develop and rehabilitate or reconstruct roads，finance for these projects heavily depends on donors＇funds since the government budget is limited．In addition，road maintenance has not been adequately implemented because of insufficient budget． According to the Study in 2005，a highway segment of 4，300km，which accounts for two thirds of the total length of highway，was not well－maintained，while one fifth of the total length of highway had deteriorated to a non－recoverable level．

Table 3－18 Budget for Road Sector（2000－2007）

|  | （Unit：thousand som） |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Capital Investment | 2000 |  | 2003 |  |
| 2005 | 2007 |  |  |  |
| Road Maintenance | 38,919 | 93,219 | 209,350 | 319,430 |
| Administration | 74,339 | 99,996 | 221,674 | $1,058,758$ |
| Total | 16,683 | 29,624 | 40,790 | 78,700 |

Source：ADB，＂Kyrgyz Republic：CAREC Transport Corridor 1 （Bishkek－Torugart Road）Project，（2008）， p．3，Table 3

## －Donors＇Assistance

Various donors provided assistance to the transport sector in Kyrgyz．
In particular，the Asian Development Bank（ADB）provided loans and technical assistance to the projects for＂the Road Rehabilitation Phase I－III＂，which were completed in 1996，1998，and 2001，as well as technical assistance for policy support in 1998 and institutional support in 2001. In addition，in 2004，ADB approved and implemented a loan for＂the Southern Transport Corridor Road Rehabilitation Project after the technical assistance for＂Improving Road

Maintenance and Strengthening the Transport Corridor Management Department". ADB also supported the development of a road network for the benefit of Central Asia and the neighboring regions through the loan project "Almaty-Bishkek Regional Road Rehabilitation" completed in 2000. Furthermore, the Bank approved a loan for "the CAREC Transport Corritor-1 (Bishkek-Torgart Road Project)" and provided technical assistance for the Project, as a part of its support for the transport sector within the framework of the Central Asia Regional Economic Cooperation (CAREC). Phase II of the Project is under preparation, also supported by ADB.

The Islamic Development Bank (IsDB) in 2003 assisted with a project to rehabilitate the 54 km segment of Suuramyr, which is a part of highway connecting Chui, Osh and Jalal-Abad, Talas and Dhzambyl, on the border with Kazakhstan.

The European Bank for Reconstruction and Development (EBRD) is going to provide a loan to upgrade a $155-220 \mathrm{~km}$ segment between Osh-Batken, which is a part of the Osh-Batken-Isfana Road Reconstruction Project.

Regarding the development of the railway network, the European Commission (EC) provided 1 million US dollars for the preparation of a feasibility study on a railway network project connecting Kyrgyz and Kazakhstan, Uzbekistan and China. European countries are interested in the development of a railway network bridging between Asia and Europe.

Table 3-19 Major Projects Financed by Donors

| Donor | Project | Approval | Components |
| :---: | :---: | :---: | :---: |
| ADB | Road Rehabilitation Phase 1-3 | $\begin{gathered} \hline \text { 1996, 1998, } \\ 2001 \\ \text { (Completed) } \end{gathered}$ | Rehabilitation of Osh-Bishkek Highway as well as support for policy reform and institutional strengthening of the road sector |
|  | Policy Support in the Transport Sector | 1998 <br> (Completed) | Policy support for the transport sector |
|  | Institutional Support in the Transport Sector | $\begin{gathered} 2001 \\ \text { (Completed) } \end{gathered}$ | Technical assistance for Institutional support for the transport sector |
|  | Improving Road Maintenance and Strengthening the Transport Corridor Management Department | $\begin{gathered} 2004 \\ \text { (Completed) } \end{gathered}$ | Technical assistance for improvement of road maintenance and strengthening of the Transport Corridor Management Department |
|  | Southern Transport Corridor Road Rehabilitation Project | $\begin{gathered} 2004 \\ \text { (On-going) } \end{gathered}$ | Rehabilitation of 120 km of the two-lane highway from Osh to Gulcha to Sopu Korgon, which is a segment of highway connecting Kyrgyz and Uzbekistan and China. |
|  | Almaty-Bishkek Regional Road Rehabilitation | $\begin{gathered} 2000 \\ \text { (Completed) } \end{gathered}$ | Rehabilitation of the Almaty-Bishkek regional road to improve links between Central Asia and the neighboring regions |
|  | CAREC Transport Corridor 1 (Biskek-Torgart Road) | $\begin{gathered} 2008 \\ \text { (On-going) } \end{gathered}$ | Rehabilitation of Bishkek-Torgart connecting Kyrgyz and China. Phase II is under preparation. |


| Donor | Project | Approval | Components |
| :---: | :--- | :---: | :--- |
| IsDB | Taraz-Suusamyr (2 sections) <br> Rehabilitation Project | 2003 <br> (Completed) | Rehabilitation of the 54km segment on <br> the Suuramyr side, which is a part of the <br> highway connecting Chui, Osh and <br> Jalal-Abad, Talas and Dhzambyl, on the <br> border with Kazakhstan |
|  | Bishkek-Osh (1 section) <br> Rehabilitation Project | - <br> (Completed) | Rehabilitation of Bishkek-Osh Road <br> (1 section) |
| EBRD | Osh-Isfana Road Upgrading <br> Project | 2009 <br> (To be <br> approved) | Rehabilitation of 155-220km of the <br> Osh-Batken road, a segment of <br> reconstruction of the Osh-Batken-Isfana <br> road |
| EC | Balykshy-Jalal-Abad-Torugart-Chi <br> na <br> Feasibility Study | Support for preparation of a feasibility <br> study on a project to rehabilitate the <br> road network connecting Kyrgyz and <br> China, Kazakhstan and Uzbekistan |  |

Source: Donors' website and the authorities

## 3-2.3 Water Supply and Sanitation

## - Current Conditions

Kyrgyz has abundant water resources. The volume of internal renewable water in the country, including surface and ground water is 46 billion $\mathrm{m}^{3}$ as of 2007. The total volume of available renewable water in Kyrgyz, however, is 21 billion $\mathrm{m}^{3}$ a year. Renewable water per capita in 2007 is $3,871 \mathrm{~m}^{3}$ a year, which decreased by more than $15 \%$ from $4,596 \mathrm{~m}^{3}$ in 1992.

There is no available data on water withdrawal for recent years. As of 2002, the annual withdrawal of ground and surface water has been approximately 10 billion $\mathrm{m}^{3}$, of which the percentage of total renewable water had decreased from $53.4 \%$ in 1992 to $49 \%$ in 2002. In terms of water use by sector in 2002, agriculture use had the largest share, with $93.8 \%$ of total water use. Domestic use and industrial use account for around $3 \%$ each.

Table 3-20 Water Resources and Use

|  | 1992 | 1997 | 2002 | 2007 |
| :--- | ---: | ---: | ---: | ---: |
| Total renewable water* (billion $\mathrm{m}^{3}$ per year) | - | - | - | 21 |
| Internal renewable water**(billion $\mathrm{m}^{3}$ per year) | - | - | - | 46 |
| Renewable water per capita (m ${ }^{3}$ per year) | 4,596 | 4,356 | 4,069 | 3,871 |
| Domestic water withdrawal per capita (m ${ }^{3}$ per year) | 61.4 | 63.7 | 63.3 | - |
| Annual withdrawals of ground and surface water <br> (\% of total renewable water) | 53.4 | 49.0 | 49.0 | - |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of June 2009)
Notes: $1^{*}$ The sum of internal renewable water resources and natural incoming flow originating from outside the country, taking into consideration the quantity of flow reserved for upstream and downstream countries through formal or informal agreements or treaties. This gives the maximum theoretical amount of water actually available for a country
Note 2:** Internal renewable water is the average annual flow of rivers and recharge of groundwater generated from endogenous precipitation

Table 3-21 Water Use by Sector

|  | 1992 | 1997 | 2002 |
| :--- | ---: | ---: | ---: |
| Total water withdrawal (billion $\mathrm{m}^{3}$ per year) | 11.0 | 10.1 | 10.1 |
| Domestic use | $2.5 \%$ | $3.0 \%$ | $3.2 \%$ |
| Use for Agriculture | $91.9 \%$ | $94.2 \%$ | $93.8 \%$ |
| Use for Industry | $5.6 \%$ | $2.9 \%$ | $3.1 \%$ |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of June 2009)

The share of population with access to improved sources of water was approximately $90 \%$ of the total population in 2006 which was an improvement from $78.6 \%$ in 2003 . However, there was a gap between urban and rural areas. In 2003, more than $99 \%$ of the urban population had access to improved sources of water while less than $70 \%$ of rural population did. Although access to improved sources of water has increased in rural areas year by year, the share of population with improved water sources in 2006 was $82.2 \%$, which was below the share of the urban population. During the period between 2003 and 2006, the production volume of clean water increased from 139.3 million $\mathrm{m}^{3}$ to 148.3 million $\mathrm{m}^{3}$. However, it later decreased to 145.2 million $\mathrm{m}^{3}$.

Table 3-22 Share of Population with Sustainable Access to Improved Sources of Water

| (Unit: \%) |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Total | 2003 |  |  |  |  | 2004 |  | 2005 | 2006 |
| Urban | $\mathbf{7 8 . 6}$ | $\mathbf{8 1 . 0}$ | $\mathbf{8 4 . 4}$ | $\mathbf{8 9 . 8}$ |  |  |  |  |  |
| Rural | 99.6 | 99.3 | 98.9 | 99.7 |  |  |  |  |  |

Source: National Statistical Committee of Kyrgyz Republic

Table 3-23 Production Volume of Clean Water

| 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: |
| 139.30 | 140.40 | 144.30 | 148.30 | 145.20 |

Source: National Statistical Committee of Kyrgyz Republic

There are few gaps in the statistics for the share of population with access to sanitation between rural and urban areas. As of 2006, $93 \%$ of the total population in the country had access to improved sanitation.

Table 3-24 Population with access to improved sanitation

| (Unit: \%) |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | :---: |
|  | 1990 | 1995 | 2000 | 2006 |  |
| Rural | - | 92 | 93 | 93 |  |
| Urban | - | 93 | 93 | 94 |  |
| Total | - | $\mathbf{9 2}$ | $\mathbf{9 3}$ | $\mathbf{9 3}$ |  |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of June 2009)

The tariff for cold water has been going up year by year: from 16.36 soms per person per month in 2003 to 22.53 soms per person per month in 2007. On the other hand, the tariff for hot water remained stable for the same period: 57.98 soms in 2003 and 58.03 soms in 2007. However, the level of the current water tariff is very far from a cost recovery level. As the water tariff system should take into account the ability of low income households to pay, as water is a life line of the people, the introduction of a new tariff system based on profitability becomes a critical issue.

Table 3-25 Water Tariff

| Category | Unit | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cold water | person/month | 16.36 | 16.39 | 16.55 | 17.86 | 22.53 |
| Hot water | person/month | 57.98 | 58.00 | 58.00 | 58.03 | 58.03 |

Source: National Statistical Committee of Kyrgyz Republic

## - Development Issues and Policies

Since independence, water supply and sewerage services have been operated by municipal utilities, called Vodakanals, in urban areas. On the other hand, the rural self-government entities Ayil Okmotu and the Department of Rural Water Supply (DRWS) under the National Agency of Local Self-Governance Affairs (NALSG)have managed the rural water supply.

In the urban areas, the municipal utilities providing urban public services face management problems, including an insufficient tariff level for cost recovery, budget shortages for installation and rehabilitation of facilities, inefficient and aging facilities. In rural areas, the rural water supply service has been deteriorating in comparison with the level of service before independence as the rural self-government entities have a lack of financial and human resources for a sustainable water supply and its expansion. As a result, in particular in rural areas, there have been hygiene issues caused by the use on the part of the rural population of untreated water from shallow wells, irrigation water, rivers and so on. It is necessary to re-examine the official data on access to improved water and sanitation since there is a possibility that the data does not reflect the reality in the country.

## - Donors'Assistance

In the ODA for the water supply and sanitation in Kyrgyz, WB has the most important role. WB assisted in the improvement of rural water supply and sanitation through the Rural Water Supply and Sanitation Project completed in 2001, in cooperation with Department of International Development (DfID). The project was implemented under coordination with the Community-Based Infrastructure Support Services Project financed by ADB. In addition, WB approved provision of loans and grants for the Second Rural Water Supply and Sanitation Project in March, 2009.

In terms of the urban water supply, EBRD is going to approve a loan for the Bishkek Water Supply Project in June 2009. The project is includes the upgrading of equipment such as water pipes and submerged pumps as well as the introduction of a cost-recovery tariff system.

Besides assistance for water supply, WB supported the expansion of sustainable irrigated agricultural production as well as the improvement of the governance of water use through the Water Management Improvement Project in 2006, which aimed for improvement of water use in the agriculture sector, in particular the improvement of water supplies for irrigation.

Table 3-26 Major Projects Financed by Donors

| Donor | Project | Approval | Components |
| :--- | :--- | :---: | :--- |
| WB <br> DFID | Second Rural Water Supply <br> and Sanitation Project | 2009 <br> (on-going) | Support for improvement of rural water <br> supply and sanitation |
| WB | Water Management <br> Improvement Project | 2006 <br> (on-going) | Improvement of water supply for irrigation <br> through increasing sustainable irrigated <br> agricultural production, and improvement of <br> governance of water use |
| ADB | Community-Based <br> Infrastructure Services <br> Project | 2000 <br> 2008 <br> (on-going) | Improvement of water supply and sanitation <br> services in rural areas |
| EBRD | Bishkek Water Supply <br> Project | 2009 <br> (Scheduled) | Upgrading of equipment including water <br> pipes and submerged pumps, introduction of <br> a cost-recoverable tariff system taking into <br> consideration low-income households |

Source: Donors' website


Source: World Bank, "Project Appraisal Document on a Proposed Credit and a Proposed Grant to the Kyrgyz Republic for A Water Management Improvement Project", (2006)

Figure 3-7 Target areas for sub-projects under the Water Management Improvement Project by WB


Source: World Bank, "Project Appraisal Document on a Proposed Credit and a Proposed Grant to the Kyrgyz Republic for A Second Rural Water Supply and Sanitation Project", (2009)

Figure 3-8 Target Area of the Second Rural Water Supply and Sanitation Project by WB

## 3-3 Macroeconomic and Fiscal Analysis

## 3-3.1 Macroeconomic Conditions

The Kyrgyz economy is very vulnerable. The economy depends on gold production and the service sector which are susceptible to impact from the international economy. As of 2006, shares of GDP were agriculture, $32 \%$, industry, $19.6 \%$ and services, $48.8 \%$. For the period between 2003 and 2007, while the GDP share of agriculture and industry was on a downward trend, the GDP share of services increased. Although the real GDP growth rate recorded minus $0.2 \%$ in 2005 due to a considerable decrease in gold production and the negative growth of agriculture, GDP grew by $8.2 \%$ in 2007 and $7.5 \%$ in 2007. However, according to the IMF report, it is estimated that GDP growth in 2009 will decline to less than $1 \%$ because of depression in the Russian and Kazakhstan economies which have a significant impact on the Kyrgyz economy though international remittances by migrant labor from Kyrgyz to Russia or Kazakhstan. According to the National Committee for Migration and Employment, international remittances for January and February 2009 decreased by $40 \%$ on the same period last year

Although the inflation rate was stable, between 3 to $5 \%$ until 2006, soaring world energy and food prices have induced high inflation in Kyrgyz since the country depends on imports of oil, chemical products and food, including wheat. The consumer price index and the food price
index increased by $10.2 \%$ and $12.6 \%$ in 2007, respectively. In particular, prices sharply went up in the second half of 2007: the inflation rate for December 2007 was more than $20 \%$ than the same period in the previous year. Due to the depreciation of international wheat prices, the inflation rate for July to December 2007 decreased by $20 \%$ on the same period last year. However, the average inflation rate of 2008 was $24.5 \%$, which is $10.2 \%$ higher than in 2007 due to the government raised electricity tariff. In addition, there are concerns about a decrease in liquidity due to funding difficulties of most of the commercial banks in Kyrgyz as half of them are owned by Kazakh banks and are now damaged by the World economic crisis.

Table 3-27 Macroeconomic Indicators for Kyrgyz (2003-2007)

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal GDP (million som) (market price) | 83,871.6 | 94,350.7 | 100,899.2 | 113,800.1 | 139.749.4 |
| GDP share by sector (\%) |  |  |  |  |  |
| Agriculture | 36.7 | 32.8 | 31.3 | 32.0 | - |
| Industry | 22.1 | 23.8 | 22.0 | 19.6 | - |
| Service | 41.2 | 43.3 | 46.7 | 48.4 | - |
| GDP Real Growth Rate (\%) |  |  |  |  |  |
| GDP | 7.0 | 7.0 | -0.2 | 3.1 | 8.2 |
| Agriculture | 3.2 | 4.1 | -4.2 | 1.7 | 1.5 |
| Industry | 12.7 | 3.0 | -9.8 | -6.9 | 9.3 |
| Service | 7.4 | 11.7 | 8.4 | 9.4 | - |
| Inflation (\%) |  |  |  |  |  |
| Consumer Price Index | 3.1 | 4.1 | 4.3 | 5.6 | 10.2 |
| Food Price Index | 2.8 | 3.2 | 5.3 | 7.6 | 12.6 |
| GDP deflator | 4.0 | 5.1 | 7.1 | 9.4 | 13.5 |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

The trade balance of Kyrgyz has been consistently deficit since 1992, except for 2001. In particular, since 2006, the trade deficit expanded because the amount of imports considerably increased due to escalating energy and food prices. The trade deficit in 2007 accounted for $39.4 \%$ of GDP, which was an increase from $6.9 \%$ in 2003. The current deficit also rapidly increased from $1.2 \%$ of GDP in 2003 to $13.4 \%$ in 2006 and $15.8 \%$ in 2007. According to an ADB report ${ }^{18}$, the deficit in 2008 is estimated as $10.5 \%$ of GDP. On the other hand, exports in 2008 increased by $39 \%$ because of expanding exports of textiles, mineral resources, and rare metals besides gold, which is the major export item of the country.

International reserves have been increasing year by year. According to the National Bank of the Kyrgyz Republic, foreign reserves are 1,225 million US dollars, which is equivalent to the import amount for 3.3 months.

[^20]Table 3-28 Balance of Payments and International Reserves (2003-2007)

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance of Payments (million USD) |  |  |  |  |  |
| Trade Balance | -135.3 | -222.2 | -429.3 | -924.1 | -1,282.8 |
| Current Balance | -42.5 | 28.9 | -29.2 | -380.0 | -591.2 |
| Overall Balance | 9.5 | 118.7 | 29.1 | 183.7 | 299.3 |
| \% of GDP |  |  |  |  |  |
| Trade Balance | -6.9 | -7.7 | -17.0 | -34.6 | -39.4 |
| Current Balance | -2.2 | 1.3 | -1.2 | -13.4 | -15.8 |
| Overall Balance | 0.5 | 5.4 | 1.2 | 6.5 | 8.0 |
| International Reserves (million USD) |  |  |  |  |  |
| Total | 399.3 | 564.5 | 612.4 | 817.2 | 1,176.7 |
| Foreign exchange | 354.3 | 508.3 | 564.5 | 731.1 | 1,093.4 |
| Exchange rate (Som per USD) |  |  |  |  |  |
| Average of period | 43.6 | 42.6 | 41.0 | 40.2 | 37.3 |

Source: ADBk, "Key Indicators for Asia and the Pacific 2008"

Although the damage on the country's economy was limited, earthquakes in the Nura region, which borders China and Tajikistan, severely harmed houses and infrastructure, including roads, as well as causing casualties in the region.

A critical issue for the Kyrgyz government is action to cope with the current economic crisis. A new tax code was enacted in January 2009. Under the new tax code, the rate of Value Added Tax (VAT) was reduced from $20 \%$ to $12 \%$ and the rate of income tax for small and medium enterprises was cut from $10 \%$ to $6 \%$. Simplification of the tax system and the reduction of tax rates did not result in a favorable reaction by tax payers but rather induced a decrease in tax revenue for the government. According to the Ministry of Finance, the government took temporary measures to exempt asset tax until the end of 2009 and will revise the tax code. It is reflects the governance and capacity of the Kyrgyz government.

## 3-3.2 Fiscal Conditions

The budget balance of Kyrgyz has been improved. The budget balance improved from a deficit of 680 million soms in 2003 to a surplus of 130 million in 2007. In 2008, despite the increased spending pressures of wages and energy, the budget deficit was contained at $1.9 \%$ of GDP (or $4.8 \%$ of GDP if grants are excluded), due to a reduction in non-priority spending and better revenue collection than was expected.

Total revenue, excluding grants, is $4,320.5$ million soms. Tax revenue accounts for $78 \%$ of the total revenue. Total expenditure is $3,587.5$ million soms, which is composed of current expenditure of $2,948.1$ million soms and capital expenditure of 638.4 million soms. Both the total revenues and expenditure increased as a share of GDP during the period from 2003 to 2007. Total revenue increased from $18.8 \%$ to $24.5 \%$ and total expenditure expanded from $20.6 \%$ to 25.7\%.

As mentioned above, the Kyrgyz government cut the VAT tax rate from $20 \%$ to $12 \%$ in January 2009. Although there are concerns that tax revenue may be reduced, government officials in
fact expect an increase in tax revenue due to the economic growth stimulated by the effects of tax reduction.

The budget deficit used to be financed by foreign borrowing. Since 2006, it has been financed by domestic borrowing.

Table 3-29 Government Finance of Kyrgyz

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Government (million som) |  |  |  |  |  |
| Total revenue and grants | 16,209.0 | 18,335.7 | 20,368.1 | 25,081.3 | 35,994.9 |
| Total revenue | 15,747.9 | 17,620.0 | 19,975.4 | 24,815.3 | 34,205.4 |
| Current revenue | 15,611.2 | 17,395.2 | 19,929.3 | 24,677.2 | 33,740.1 |
| Tax | 11,912.0 | 13,980.5 | 16,361.4 | 19,981.2 | 26,544.8 |
| Capital receipts | 136.7 | 224.8 | 46.1 | 138.0 | 465.3 |
| Grants* | 461.2 | 715.8 | 392.5 | 266.1 | 1,789.5 |
| Total expenditure | 17,289.6 | 19,251.6 | 20562.2 | 25,489.0 | 35,864.9 |
| Current expenditure | 15,522.1 | 17,270.9 | 18,939.5 | 23,029.7 | 29,480.7 |
| Capital expenditure | 1,767.5 | 1,980.7 | 1,622.7 | 2,459.3 | 6,384.2 |
| Overall budgetary surplus/deficit | -681.6 | -505.8 | 224.4 | -216.5 | 130.0 |
| Government Finance (million som) |  |  |  |  |  |
| Domestic borrowing | -181.6 | 416.2 | -35.5 | 961.1 | 1,309.1 |
| Foreign borrowing | 777.8 | 301.8 | 236.2 | -24.9 | -483.5 |
| Use of cash balances | 85.4 | -212.5 | -425.1 | -719.7 | -955.6 |
| \% of GDP |  |  |  |  |  |
| Total revenue | 18.8 | 18.7 | 19.8 | 21.8 | 24.5 |
| Total expenditure | 20.6 | 20.4 | 20.4 | 22.4 | 25.7 |
| Overall budgetary surplus/deficit | -0.8 | -0.5 | 0.2 | -0.2 | 0.1 |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"
Note: Includes balance of special funds, budget and mutual funds, and other revenue items other than official grants.

Within the total government spending, the largest budget, of more than 8,000 million soms, was allocated to education. Following education, the government allocated a budget of 4,340 million soms for defense, 3,780 million soms for social security and welfare, and 3,660 million soms for health. Except for the budget for defense, social spending was prioritized. The government of Kyrgyz further expanded assistance to poor families from October 2008, increasing the social insurance of 3 dollars per person to 4 dollars. This social assistance program is implemented using grant funds provided by donors, rather than the government budget.

The share of spending on economic services is relatively low compared to spending on the social sector. In particular, in 2007, there was no budget allocation to the electricity, gas and water sectors, where privatization had been promoted.

Table 3-30 Public Expenditure of Kyrgyz by Sector

| Sector | 2003 | 2004 | 2005 | (Unit: million som) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| General public services | $2,640.8$ | $3,097.5$ | $3,039.6$ | $3,358.4$ | $3,359.8$ |
| Defense | $2,403.7$ | $2,687.7$ | $3,099.8$ | $3,606.2$ | $4,336.6$ |
| Health | $1,629.9$ | $1,926.5$ | $2,283.3$ | $3,059.1$ | $3,659.4$ |
| Education | $3,753.6$ | $4,361.3$ | $4,917.7$ | $6,314.2$ | $8,022.3$ |
| Housing and community amenities | $1,193.4$ | $1,057.7$ | $1,040.6$ | $1,415.5$ | $1,079.6$ |
| Social security and welfare | $2,588.7$ | $2,644.8$ | $2,858.1$ | $3,610.6$ | $3,782.2$ |
| Economic services | $1,840.2$ | $1,909.4$ | $1,911.3$ | $2,342.8$ | $2,656.8$ |
| Agriculture | 783.0 | 896.0 | 887.8 | $1,106.2$ | 895.9 |
| Industry | 282.5 | 270.1 | 290.8 | 292.4 | 100.1 |
| Electricity, gas and water | 163.3 | 27.7 | 57.2 | 6.3 |  |
| Transport and communication | 565.3 | 653.3 | 594.6 | 854.6 | 605.7 |
| Other economic services | 46.1 | 62.3 | 80.9 | 83.3 | $1,055.1$ |
| Other expenditure | 840.3 | $1,156.8$ | 993.3 | $1,591.0$ | $1,954.0$ |
| Total expenditure | $\mathbf{1 6 , 8 9 0 . 6}$ | $\mathbf{1 8 , 8 4 1 . 5}$ | $\mathbf{2 0 , 1 4 3 . 7}$ | $\mathbf{2 5 , 2 9 7 . 8}$ | $\mathbf{2 9 , 4 8 0 . 7}$ |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

In terms of the budget for CDS (2006-2010), financial gaps vary by sector. The financial gap is limited in the social sector since the budget depends on funds provided by donors. On the other hand, only limited financial sources are fixed for the sector of energy, industry, agriculture and SME development since it is expected that the private investment will be attracted for these sectors. For the transport sector, only 235 million soms have been ensured for a requirement budget of 2,662 million soms.

For the total budget of CDS, 106 billion soms have been already financed but the rest, of more than 261 billion soms, (6,218 million US dollars) are not ensured.

Table 3-31 Assessment of CDS-2 Resources (2007-2010)

| Sector | Requirements | Capacity | Financial Gap |  |
| :--- | ---: | ---: | ---: | ---: |
|  | (million som) | (million som) | (million som) | (million USD) |
| Energy | 144,900 | 197.82 | $144,702.18$ | $3,455.29$ |
| Mining | 22,680 | 583.80 | $22,096.20$ | 526.10 |
| Development of agriculture and <br> processing | 12,600 | $4,051.32$ | $8,548.68$ | 203.54 |
| Development of small and medium <br> business | 12,600 | $4,051.32$ | $8,548.68$ | 203.54 |
| Construction | 8,400 | $5,104.68$ | $3,295.32$ | 78.46 |
| Tourism development | 7,140 | 19.32 | $7,120.68$ | 169.54 |
| Transport infrastructure | 26,620 | $2,350.32$ | $23,269.68$ | 554.04 |
| Communication and information | 5,040 | $1,007.16$ | $4,032.84$ | 96.02 |


| Sector | Requirements | Capacity | Financial Gap |  |
| :--- | ---: | ---: | ---: | ---: |
|  | （million som） | （million som） | （million som） | （million USD） |
| Development of innovative <br> technologies | 4,200 | 414.96 | $3,785.04$ | 90.12 |
| Combating corruption | 3,570 | $2,028.12$ | $1,541.82$ | 36.71 |
| Education essential for society | 33,600 | $28,282.00$ | $5,317.20$ | 126.60 |
| Accessible and quality health care | 18,900 | $13,956.60$ | $4,943.40$ | 117.70 |
| Effective systems of social <br> protection and social insurance | 46,200 | $43,178.52$ | $3,021.48$ | 71.94 |
| Labor market and migration <br> processes optimization | 8,400 | 636.72 | $7,763.28$ | 184.84 |
| Broadening of population <br> participation in cultural life | 840 | 641.34 | 196.66 | 4.73 |
| Provision of environmental safety | 2,520 | 444.55 | $2,075.45$ | 49.42 |
| Provision of population and territory <br> complex safety in the case of natural <br> disasters and catastrophes | 16,800 | $2,950.07$ | $13,849.93$ | 329.76 |
| Total |  |  |  |  |

Source：Kyrgyz Republic，＂Country Development Strategy 2007－2010＂，p．97－100

## 3－3．3 Debt Sustainability

The total debt outstanding of Kyrgyz is 2，381 million US dollars in 2006，which accounts for $85.6 \%$ of Gross National Income（GNI）．The debt service－export ratio is $5.7 \%$ ．The debt indicators have been improving for the last several years．While the external debt as percent of GNI decreased by 23 points from 109\％in 2003，the debt service－export ratio also declined by 14 points from $19.8 \%$ in 2003.

Table 3－32 External Indebtedness of Kyrgyz

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| External debt（million USD） |  |  |  |  |  |
| Total debt outstanding and disbursed | 2，023．7 | 2，111．1 | 2，027．3 | 2，381．8 | － |
| Long－term | 1，783．1 | 1，896．7 | 1，825．3 | 2，110．8 | － |
| Public and publicly guaranteed | 1，584．5 | 1，742．4 | 1，664．8 | 1，860．2 | － |
| Private non－guaranteed | 198.6 | 154.3 | 160.5 | 250.7 | － |
| Short－term | 38.7 | 7.5 | 24.1 | 107.9 | － |
| Use of IMF credit | 201.9 | 206.9 | 177.9 | 163.1 | － |
| Debt service（million USD） |  |  |  |  |  |
| Principal repayment on long－term debt | 102.1 | 99.0 | 73.6 | 45.6 | 230.8 |
| Interest on long－term debt | 26.9 | 28.3 | 21.2 | 20.6 | 34.0 |
| Interest on short－term debt | 0.7 | 0.2 | 0.5 | 2.1 | － |
| Debt indicators（\％） |  |  |  |  |  |
| External debt as percent of GNI | 109.0 | 100.1 | 85.0 | 85.6 | － |
| Total long－term debt as percent of total debt | 88.1 | 89.8 | 90.0 | 88.6 | － |
| Debt service as percent of export of goods and services | 19.8 | 14.2 | 10.0 | 5.7 | － |

Source：ADB，＂Key Indicators for Asia and the Pacific 2008＂より作成

- Debt Sustainability Analysis (DSA)

In December, 2008, WB and IMF jointly conducted a Debt Sustainability Analysis (DSA). The baseline macroeconomic assumptions are as follows:

## Assumptions of Major Macroeconomic Indicators (2009~2028)

- Real GDP growth rate: $5 \%$ annually (ref. historical average $4.5 \%$ )
- GDP deflator (2011~2028): 4.5\% annually
- Export growth: average $6.3 \%$ per year
- Annual average 6.6\% per year
- Net FDI flows as percent of GDP: 3\%
- Budget deficit as percent of GDP: $1 \%(2009 \sim 2028)$, it is anticipated that the primary deficit will increase to about $1.5 \%$ of GDP due to the closure of the currently operating Kumotr mine by 2014-15.

Under the baseline scenario of the joint DSA by WB and IMF, it is projected that domestic borrowing will become a major funding source for financing the budget deficit of Kyrgyz in the mid and long-term. Currently, although domestic debt accounts for less than $10 \%$ of the total public debt, it is expected that domestic borrowing will increase at one third of the total public debt until 2028. The PV (Present Value) of public debt to GDP ratio is projected to decrease from $40 \%$ in 2007 to $26.5 \%$ in 2013, but to increase again to $41.5 \%$ in 2028 . Although tax revenue is anticipated to decline due to the cut in the VAT rate in 2009 and the reduction of income tax revenue caused by the closure of the existing Kumtor mine, the tax revenue ratio will increase to $27.5 \%$ in 2028 from $23 \%$ in 2007. In the long term, the sustainability of public debt indicators remain because of the gradual recovery of income tax revenue as well as discipline on the expenditure side. Should there be a decline in the real GDP, there is concern that the debt indicators of Kyrgyz could deteriorate considerably in the long term since the Kyrgyz's external debt is vulnerable to volatility in the real GDP and the exchange rate. However, Kyrgyz's public debt outlook is projected to be manageable in the mid and long term. Overall, WB and IMF assessed that Kyrgyz is at moderate risk of debt distress based on the projected external debt burden indicators.

This study review DAS considering the impacts of the global economic crisis of 2008 on the Kyrgyz economy, including the reduction in remittances from the migrating workers to Russia or Kazakhstan and the shrinking of international trade. Those factors indicate that the projected economic growth rate in 2009 should be revised downwards. In addition, Russia announced that it would provide economic assistance to the Kyrgyz government. As a result of DAS by the Study, the PV of debt to GDP ratio is projected to decrease at around $50 \%$, which is lower than the present level. However, the external debt ratio will remain high. In the long term, since government finance will continue to depend on concessional loans, debt service to export or revenue ratios are forecasted to be in downward trend.


Figure 3-9 Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios 2008-2028


2/ Revenues are defined inclusive of grants.

Figure 3-10 Indicators of Public Debt under Alternative Scenarios 2008-2028

The Study examined impacts of new Japanese ODA loans on debt sustainability of the Kyrgyz Republic. In the case that no other conditions change, the new additional external public loan could slightly increase the debt indicators, such as debt-service to export ratio and debt-service to revenue ratio, but under the thresholds. Therefore, it is anticipated that provision of new concessional loan will have only little impact on debt sustainability of the country.

Table 3-33 Sensitivity of New ODA Loan on Debt Sustainability (2028)

|  | Base case | Japan's ODA <br> Loan of <br> 10 billion JPY | Japan's ODA <br> Loan of <br> 30 billion JPY | Japan's ODA <br> Loan of <br> 50 billion JPY |
| :--- | ---: | ---: | ---: | ---: |
| Debt-service to export ratio (\%) | 5.3 | 5.4 | 5.7 | 6.0 |
| PPG debt-service to export ratio (\%) | 5.0 | 5.2 | 5.5 | 5.7 |
| PPG debt-service to revenue ratio (\%) | 16.5 | 17.0 | 17.9 | 18.8 |

Source: The study team's estimation
Note: It is assumed that Japan's ODA loan will be disbursed equally for the period between 2012 and 2019.

## 3-4 Major Donors’ Activities in Kyrgyz

## 3-4.1 Outlook of Official Development Assistance in Kyrgyz

Within the accumulated ODA amount since the independence of Kyrgyz, the World Bank is the largest donor in Kyrgyz and the second largest donor is the Asian Development Bank. However, for the period between 2003 and 2007, Turkey was the most active donor from 2004. After Turkey, the United States, WB and ADB constantly provided assistance to the country.

Recently, it is reported that Russia will provide large scale economic assistance to Kyrgyz. Since Russia is not a member country of OECD/DAC, assistance by Russia to Kyrgyz has not been reported to OECD/DAC. According to local news, Russia's economic assistance to Kyrgyz is a part of emergency assistance. The outline of the assistance is as follows:

1 Budget support on a grant basis of 150 million US dollars,
2 Project support on a concessional loan basis (equivalent condition as IDA loan) of 300 million US dollars,

3 Debt SWAP of 193 million US dollars,
4 Investment by Joint Venture between Russia and Kyrgyz on the construction of the Kambarata hydropower plant of 700 million US dollars.

Table 3-34 Official Development Assistance by Donors (Disbursement)

| (Ume period |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Donor | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |
| Turkey | 2.27 | 34.74 | 57.45 | 113.14 | 69.56 |  |  |  |  |
| United States | 40.06 | 39.9 | 40.76 | 50.32 | 39.82 |  |  |  |  |
| IDA | 31.85 | 24.1 | 35.51 | 29.6 | 39.76 |  |  |  |  |
| ADB | 22.18 | 50.36 | 25.1 | 35.76 | 21.35 |  |  |  |  |


| Donor | Time period | 2003 |  | 2004 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2005 |  | 2006 |  | 2007 |  |
| Japan | 31.23 | 26.69 | 20.95 | 17.22 | 15.68 |
| Germany | 14.79 | 13.67 | 27.64 | 17.88 | 25.02 |
| EC | 10.05 | 22.94 | 17.99 | 11.98 | 19.88 |
| Switzerland | 8.6 | 10.42 | 9.31 | 16.54 | 10.56 |
| United Kingdom | 7.07 | 6.29 | 9.36 | 11.19 | 12.95 |
| Sweden | 0.92 | 2.53 | 2.52 | 4.98 | 7.39 |
| EBRD | 1.95 | 2.65 | 2.28 | 0.56 | 0.24 |
| IMF(SAF/ESAF/PRGF) | 5.11 | -3.89 | -12.97 | -23.64 | -20.77 |

Source: OECF/DAC International Development Statistics and ADB Annual Report 2007

## 3-4.2 Joint Country Support Strategy (JCSS)

In Kyrgyz, five donors, the United Nation (UN), WB, ADB, the Department for International Development of UK (DfID) and the Swiss Agency for Development and Cooperation, jointly prepared a Joint Country Support Strategy (JCSS) for CDS-1. After that, the European Commission (EC) and Germany participated with the JCSS framework in December 2007.

The JCSS for Kyrgyz was prepared as one of the pilot countries for JCSS as part of the trend in international donor harmonization. While the JCSS aims to contribute to the achievement of the target of the CDS-1, donors pointed out several issues in the CDS-1. The JCSS shows 4 priority issues along with the CDS-1 as well as priority support areas to cope with each issue. Each donor set individual assistance strategies and priority areas according to its mandate and specialties.

Table 3-35 Development Focus and Priority Support Areas

| Development Focus | Priority Support Areas |
| :--- | :--- |
| Economic management <br> consistent with strong and <br> sustained pro-poor growth | -Financial and analytical support aimed at improving budget an public <br> financial management, ensuring debt sustainability and developing a <br> robust financial system <br>  <br> - Support to adopt and implement a new tax code that removes <br> ambiguities and contradictions and fosters a business friendly <br> regulatory environment |
|  | - Support the implementation of the agriculture sector strategy and the <br> development of rural auxiliary services |
| Support creation of transparent tariff structures, and improved legal <br> and regulatory framework, good corporate governance and financing <br> arrangements consistent with cost-recovery that will help attract <br> private capital into the energy and mining sectors |  |
| - Financial and technical support to the transport sector that will |  |
| facilitate trade and transit |  |


| Development Focus | Priority Support Areas |
| :---: | :---: |
|  | - Support for improvements in business environment and investment climate |
| Building sustainable human and social capital | Support for preparation of the Government's national human resource strategy that seeks to link labor market needs to education and training Development a Sector-Wide Approach (SWAPs) in the education sector to improve financing of education <br> Support for Manas Taalimi, a five year program focusing on population involvement in health issues <br> Support for strengthening the role of the Ministry of Health in the areas of health policy formulation, inter-sector cooperation and donor coordination <br> - Technical assistance and policy dialogue support for comprehensive pension reform and the implementation of the Children's Code <br> - Support to social reforms through Technical Assistance and sector work |
| Environmental sustainability and natural resources management | Support for more effective disaster risk management <br> Support for new initiatives in energy conservation and renewable power provision, which presents promising opportunities in rural areas <br> Further support to irrigation modernization that goes beyond physical infrastructure remodeling and extends to modern methods of managing and paying for irrigation supplies <br> - Support to development of local capacity for the Environmental and Natural Resources Management (ENRM) |

Source: "Joint Country Support Strategy for the Kyrgyz Republic (2007-2010)"

## 3-4.3 Major Donors' Activities in Kyrgyz

## - World Bank/ International Development Association (IDA)

WB is the largest donor in Kyrgyz and started assistance in the country in 1992. There are 35 staff in the Kyrgyz office. The annual average disbursement is around $45-50$ million US dollars. Until 2000, WB provided implementation of all projects including technical assistance by loans. However, since 2001, WB has also provided grants. In fact, particularly after agreement at the Paris Club in 2005, WB implemented almost all projects by grant. In late 2008, WB formulated a project financed by grant and loan since the debt sustainability of the country had improved.

In the framework of JCSS, WB puts priority on: a. economic growth (development of the business and investment climate); b. governance; c. social services. A half of the on-going projects financed by WB are related to rural development. These projects are not only for agricultural technical assistance but also for comprehensive rural development. Thus, the projects include components of irrigation, development of the investment climate, social services and so forth. WB is currently considering projects to cope with the economic crisis, soaring global food prices, and the energy crisis.

Table 3-36 WB Projects in Kyrgyz

| (Unit: million USD) |  |  |  |
| :---: | :---: | :---: | :---: |
| Project | Scheme | Approval Date/ Status | Amount |
| Rehabilitation Project | IDA Loan | 13-May-93 Completed | $\begin{array}{r} 60 \\ \text { (+Netherland4.9) } \end{array}$ |
| Social Safety Net Project | IDA Loan | 5-Jul-94 <br> Completed | $\begin{array}{r} 17 \\ \text { (+Switzerland 2.7) } \end{array}$ |
| Telecommunications Reform | IDA <br> Loan | 23-Jun-94 <br> Completed | $\begin{array}{r} 18 \\ (+ \text { EBRD } 8) \end{array}$ |
| Privatization \& Enterprise Sector Adjustment Credit (PESAC) | IDA <br> Loan | $\begin{aligned} & \text { 29-Jun-94 } \\ & \text { Completed } \\ & \hline \end{aligned}$ | 60 |
| Private Enterprise Support Project | IDA <br> Loan | 4-May-95 Completed | 15 (+Japan 2.5 +Foreign Commercial L oan 2.0) |
| Agricultural Privatization \& Enterprise Adjustment Credit (APEAC) | IDA <br> Loan | 28-Jun-95 Completed | 45 |
| Sheep \& Wool Improvement Project | IDA <br> Loan | 14-May-96 Completed | $\begin{array}{r} 11.6 \\ (+ \text { IFAD } 3.5) \\ \hline \end{array}$ |
| Health Project | IDA <br> Loan | 14-May-96 Completed | 18.5 |
| Power \& District Heating Rehabilitation Project | IDA <br> Loan | 23-May-96 <br> Completed | $\begin{array}{r} 20 \\ \text { (+ADB } 30 \\ + \text { Switzerland 4.5 } \\ + \text { DANIDA 8.6 } \\ + \text { NDF 6.8) } \\ \hline \end{array}$ |
| Financial Sector Adjustment Credit (FSAC) | IDA <br> Loan | 25-Jun-96 <br> Completed | 45 |
| Financial Sector Technical Assistance (TA) Project | IDA <br> TA/Loan | 25-Jun-96 Completed | $\begin{array}{r} 3.4 \\ \text { (+ Other bilateral aid } \\ 3.9 \text { ) } \\ \hline \end{array}$ |
| Public Sector Resource Management Adjustment Credit | IDA <br> Loan | 16-Apr-97 Completed | $\begin{array}{r} 44 \\ \text { (+ EC-TACIS } 1.3 \\ + \text { UNDP } 0.7) \\ \hline \end{array}$ |
| Rural Finance Project | IDA <br> Loan | 5-Jun-97 <br> Completed | $\begin{array}{r} 16 \\ \text { (+ EC-TACIS } 2 \\ + \text { Switzerland 0.6) } \end{array}$ |
| Agriculture Support Services Project (ASSP) | IDA <br> Loan | 7-May-98 Completed | 14.98 (+Switzerland $0.9+$ GTZ0.4+ IFAD7.9+DFID0.8) |
| Irrigation Rehabilitation Project | IDA <br> Loan | $\begin{gathered} \text { 7-May-98 } \\ \text { Completed } \\ \hline \end{gathered}$ | 35 |
| Social Sector Adjustment Credit (SOSAC) | IDA <br> Loan | 10-Dec-98 <br> Completed | 36.5 |
| Power and District Heating Supplemental | IDA <br> Loan | $\begin{aligned} & \text { 25-Jun-98 } \\ & \text { Completed } \end{aligned}$ | 15 |
| Flood Emergency Project | IDA <br> Loan | $\begin{aligned} & \text { 26-Jan-99 } \\ & \text { Completed } \end{aligned}$ | 10 |
| Rural Finance 2 Project | IDA <br> Loan | 24-Jun-99 <br> Completed | 15 |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Land \& Real Estate Registration Project | IDA <br> Loan | 6-Jun-00 <br> Completed | 9.42 |
| On-Farm Irrigation Project | IDA <br> Loan | $\begin{gathered} \hline \text { 6-Jun-00 } \\ \text { Completed } \end{gathered}$ | 20 |
| Consolidated Technical Assistance (TA) Project | IDA <br> Loan | $\begin{aligned} & \hline \text { 22-Jun-00 } \\ & \text { On-going } \end{aligned}$ | 5 |
| Kyrgyz Urban Transport Project | IDA <br> Loan | 22-Aug-00 <br> Completed | 22 |
| Consolidation Structural Adjustment Credit (CSAC) | IDA <br> Loan | 14-Sep-00 Completed | 35 |
| Health Sector Reform 2 Project | IDA <br> Loan | 8-May-01 Completed | $\begin{array}{r} 15 \\ \text { (+DIFD3.0) } \end{array}$ |
| Support to Comprehensive Development Framework Program (CDF) Process (PHRD) | PHRD <br> Grant | 22-Mar-01 Completed | 0.32 |
| Rural Water Supply \& Sanitation Project | IDA <br> Loan | 4-Dec-01 Completed | $\begin{array}{r} 15 \\ (+ \text { DFID6.25) } \end{array}$ |
| Governance Structural Adjustment Credit (GSAC) | IDA <br> Loan | 15-May-03 <br> Completed | 20 |
| Governance Technical Assistance Project | IDA <br> Loan | 15-May-03 <br> On-going | 7.78 |
| Village Investment Project | IDA <br> Grant | 16-Dec-03 <br> Completed | (+Foreign fund 0.88 ) |
| Payments \& Banking System Modernization Project | IDA | 16-Mar-04 <br> On-going | 9 |
| Disaster Hazard Mitigation Project | IDA <br> Loan | 15-Jun-04 <br> On-going | $\begin{array}{r} 6.9 \\ \text { (+GEF 1.0 + Japan 1.95) } \end{array}$ |
| Small Towns Infrastructure \& Capacity Building Project | IDA (Loan12+ Grant3) | 14-Dec-04 On-going | 15 |
| Agribusiness \& Marketing Project | IDA <br> Loan | 14-Dec-04 On-going | (+International aid agency 4.75) |
| Rural Education Project | IDA <br> Grant | 14-Dec-04 <br> On-going | 15 |
| KG - DISASTER HAZARD MSP | GEF <br> Grant | $\begin{gathered} \text { 19-May-05 } \\ \text { On-going } \\ \hline \end{gathered}$ | 1 |
| Health \& Social Protection Project | IDA <br> Grant | 15-Dec-05 <br> On-going | 15 (+KFW 20 +DFID 13 +Other bilateral aid 164) |
| Strengthening Organization Structure \& Statistics Capacity of National Statistics System Partnership | Trust Fund For Statistical Capacity Building Grant | 30-Dec-05 Completed | 0.24 |
| Avian Influenza Control \& Human Pandemic Preparedness \& Response Project | IDA Grant | 9-Feb-06 <br> On-going | $\begin{array}{r} 4 \\ \text { (+Japan } 1 \\ \text { +Other bilateral aid } 0.1 \text { ) } \end{array}$ |
| Water Management Improvement Project (WMIP) | IDA Grant | 29-Mar-06 <br> On-going | $\begin{array}{r} 19 \\ \text { (+Japan 4.4) } \end{array}$ |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Reducing Technical Barriers for Entrepreneurship and Trade | IDA <br> Grant | $\begin{aligned} & \text { 13-Jul-06 } \\ & \text { On-going } \end{aligned}$ | 5 |
| Second Village Investment Project | IDA <br> Grant | 3-Aug-06 On-going | $\begin{array}{r} 15 \\ \text { (+DFID 13.2) } \end{array}$ |
| Education for All Fast Track Initiative Catalytic Fund Grant | Grant | $\begin{gathered} \text { 22-May-07 } \\ \text { On-going } \end{gathered}$ | 9 |
| Second On-farm Irrigation Project | IDA <br> Grant | $\begin{aligned} & \text { 19-Jun-07 } \\ & \text { On-going } \end{aligned}$ | 16 |
| Agricultural Investments and Services Project | IDA <br> Grant | 29-Apr-08 <br> On-going | $\begin{array}{r} 9 \\ (+ \text { IFAD } 9 \\ + \text { Switzerland2.6) } \end{array}$ |
| Bishkek and Osh Urban Infrastructure Project | IDA <br> Grant | 18-Mar-08 <br> On-going | 12 |
| Capacity Building for Economic Management Grant | IDA Grant | $\begin{aligned} & \hline \text { 1-Jul-08 } \\ & \text { On-going } \end{aligned}$ | 3 |
| Health \& Social Protection Project | IDA <br> Grant | $\begin{aligned} & \hline \text { 12-Jun-08 } \\ & \text { On-going } \\ & \hline \end{aligned}$ | 6 |
| Agricultural Investments and Services Project - Additional Financing | IDA <br> Grant | $\begin{aligned} & \hline \text { 13-Jun-08 } \\ & \text { On-going } \end{aligned}$ | 4 |
| Second Land and Real Estate Registration Project | IDA Grant | 15-Jul-08 On-going | 5.85 |
| KG: Implementation of Statistical Master Plan | Trust Fund For Statistical Capacity Building Grant | 18-Jul-08 <br> On-going | 0.3 |
| Emergency Energy Assistance | IDA <br> Grant50\%+ <br> Loan50\% | 25-Nov-08 <br> On-going | 11 |
| Additional Financing for the Small Town Infrastructure \& Capacity Building Project | $\begin{gathered} \text { IDA } \\ \text { Grant1.8+ } \\ \text { Loan2.2 } \\ \hline \end{gathered}$ | 2-Apr-09 <br> On-going | 3.3 |
| Second Rural Water Supply \& Sanitation Project | IDA <br> Loan | $\begin{gathered} \text { 21-Apr-09 } \\ \text { On-going } \\ \hline \end{gathered}$ | 9.08 |
| National Road Rehabilitation (Osh-Isfana) Project | IDA <br> Loan | N/A Pipeline | 20 |
| Strengthening the National Statistical System of Kyrgyz Republic | IDA | N/A Dropped | 1 |

Source: World Bank website (http://www.worldbank.org/ as of June 2009)

## Asian Development Bank (ADB)

ADB is the second largest donor in Kyrgyz and has disbursed 644 million US dollars so far. During 2005 and 2006, ADB adopted the framework of a $50 \%$ grant for Kyrgyz. Since January 2007, ADB introduced a new grant framework for the country, which is a grant of $100 \%$ for 2007 and 2008. After that, due to improvement in the debt sustainability of the country, ABD will provide grants of $50 \%$ and loans of $50 \%$ in their portfolio.

Although previously ADB focused on poverty reduction, the Bank now prioritizes the transport
and communication sector, the agriculture and natural resource sector and the education sector as well as areas such as private sector development, regional cooperation and the environment, which cut across sectors. In the past, projects for transport and communication accounted for around $30 \%$. In particular, ADB considers the transport sector as the most important sector with a role to play in the economic development of an inland country such as Kyrgyz. ADB will continuously support the transport sector, including the road sector, as well as providing support for the development of urban transport in Bishkek, Osh and the surrounding areas of Lake Issik-kul and for economic and financial sector reform for the improvement of the business environment.

Table 3-37 ADB Projects in Kyrgyz
(Unit: million USD)

| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Seminars on the Bank Operational Policies and Procedures in 1995 and 1996 | TA | 28 Sep 1994/ Completed | 0.08 |
| Strengthening of Banking System | TA | 5 Dec 1994/ Completed | 0.6 |
| Special Assistance | Loan | 8 Dec 1994/ Completed | 40 |
| Institutional Support for Procurement and Disbursement | TA | 8 Dec 1994/ Completed | 0.48 |
| Education and Training Master Plan | TA | 17 Jan 1995/ Completed | 0.9 |
| Industry and Trade Sector Study | TA | 3 Feb 1995/ Completed | 0.6 |
| Strengthening Environmental Institutions and Improving Procedures for EIA | TA | 13 Sep 1995/ Completed | 0.56 |
| Agriculture Sector Program | $\begin{gathered} \hline \text { Loan } \\ \text { TA } \end{gathered}$ | 23 Nov 1995/ Completed 29 Dec 1994/ Completed | $\begin{aligned} & \hline 40 \\ & 0.6 \end{aligned}$ |
| Reorganization and Strengthening of the Ministry of Agriculture and Food | TA | 23 Nov 1995/ Completed | 1.32 |
| Building Capacity for the Formation and Management of Water Users Associations | TA | 23 Nov 1995/ Completed | 0.86 |
| Agricultural Credit Pilot Project | TA | 27 Nov 1995/ Completed | 0.91 |
| Strengthening the Ministry of Economy | TA | 14 Dec 1995/ Completed | 0.85 |
| Revaluation and Tariff Study for Kyrgyz National Energy Holding Company (KNEHC) | TA | 13 Mar 1996/ Completed | 0.31 |
| Power and District Heating Rehabilitation | Loan | 6 Jun 1996/ Completed | 30 |
| Institutional Strengthening of the Road Sector | TA | 13 Jun 1996/ Completed | 0.8 |
| Road Rehabilitation | $\begin{gathered} \text { Loan } \\ \text { TA } \end{gathered}$ | $\begin{aligned} & 13 \text { Jun 1996/ Completed } \\ & 21 \text { Dec 1994/ } \\ & \text { Completed } \\ & \hline \end{aligned}$ | 50 0.6 |
| Preparation and Implementation of Guidelines on Best Practice in Corporate Governance | TA | 13 Dec 1996/ Completed | 0.1 |
| Rural Financial Institutions | Loan | 21 Aug 1997/ Completed | 12.5 |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Capacity Building in Corporate Governance and Insolvency Procedures | Loan | 25 Sep 1997/ Completed | 4 |
| Corporate Governance and Enterprise Reform Program | Loan | 25 Sep 1997/ Completed | 40 |
| Strengthening the Economic Policy Making and Monitoring Capabilities of the PM's Office | TA | 25 Sep 1997/Completed | 0.8 |
| Education Sector Development Project | Loan | 29 Sep 1997/ Completed | 19 |
| Strengthening of Education Planning and Administration | TA | 29 Sep 1997/ Completed | 0.93 |
| Education Sector Development Program | Loan | 29 Sep 1997/ Completed | 13.7 |
| Institutional Strengthening for Social Services Delivery and Finance | TA | 27 Nov 1998/ Completed | 0.63 |
| Environmental Monitoring and Management Capacity Building | TA | 11 Dec 1997/ Completed | 0.6 |
| Pension Reform | TA | 23 Dec 1997/ Completed | 0.68 |
| Seminars on Bank Operational Policies and Procedures - Phase II in 1998 and 1999 | TA | 23 Jan 1998/ Completed | 0.11 |
| Community-Based Infrastructure Services | TA | 20 Jul 1998/ Completed | 0.6 |
| Capacity Building in the Ministry of Agriculture and Water Resources | TA | 29 Jun 1998/ Completed | 0.47 |
| Second Road Rehabilitation | $\begin{gathered} \hline \text { Loan } \\ \text { TA } \end{gathered}$ | 10 Sep 1998/ Completed <br> 11 Feb 1997/ Completed | $\begin{array}{r} 50 \\ 0.6 \end{array}$ |
| Policy Support in the Transport Sector | TA | 10 Sep 1998/ Completed | 0.6 |
| Food Emergency Rehabilitation | Loan | 24 Sep 1998/ Completed | 5 |
| Social Services Delivery and Finance | $\begin{gathered} \text { Loan } \\ \text { TA } \end{gathered}$ | 27 Nov 1998/ Completed 19 Nov 1996/ Completed | $\begin{array}{r} 10 \\ 1.1 \end{array}$ |
| Strengthening Aid Coordination and Management | TA | 9 Jun 1999/ Completed | 0.12 |
| Institutional Strengthening of the Financial Sector | TA | 9 Aug 1999/ Completed | 0.6 |
| Strengthening Capacity of the Office of the President | TA | 30 Aug 1999/ Completed | 0.34 |
| Commercial Bank Audits (TA Loan) | Loan | 17 Dec 1999/ Completed | 1 |
| Financial Intermediation and Resource Mobilization Program | Loan | 17 Dec 1999/ Completed | 35 |
| Agriculture Area Development | $\begin{gathered} \text { Loan } \\ \text { TA } \end{gathered}$ | 20 Dec 1999/ Approved 12 May 1998/ Completed | $\begin{array}{r} 36 \\ 0.9 \end{array}$ |
| Institutional Strengthening in Planning and management of Agricultural Development | TA | 20 Dec 1999/ Completed | 0.8 |
| Strengthening Capacity of the Ministry of Finance for Financial Management and Planning of the Public | TA | 28 Dec 1999/ Completed | 0.46 |
| Capacity Building in the Ministry of Agriculture and Water Resources (Phase II) | TA | 11 May 2000/ Completed | 0.59 |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Community-Based Infrastructure Services Sector Project | Loan Grant | 8 Jun 2000/ Approved 3 Nov 2008/Approved | 36 <br> 30 |
| Institutional Strengthening for Community-Based Infrastructure Services | TA | 8 Jun 2000/ Completed | 0.65 |
| Support to the National Strategy for Poverty Reduction | TA | 14 Jun 2000/ Completed | 0.6 |
| Environmental Monitoring and Management Capacity Building II | TA | 11 Sep 2000/ Completed | 0.65 |
| Almaty-Bishkek Regional Road Rehabilitation | Loan | 31 Oct 2000/ Completed | 5 |
| Improvement of the Road Sector Efficiency | TA | 31 Oct 2000/ Completed | 0.44 |
| Skills and Entrepreneurship Development | $\begin{gathered} \text { Loan } \\ \text { TA } \end{gathered}$ | 28 Nov 2000/ Completed <br> 5 Oct 1998/ Completed | $\begin{array}{r} 25 \\ 0.6 \end{array}$ |
| Improving the Enabling Environment for Skills and Entrepreneurship Development | TA | 28 Nov 2000/ <br> Terminated/ Cancelled | - |
| Governance Assessment Study for Sound Development Management and Poverty Reduction | TA | 28 May 2001/ Completed | 0.1 |
| Third Road Rehabilitation | $\begin{gathered} \text { Loan } \\ \text { TA } \end{gathered}$ | $\begin{gathered} 31 \text { Oct 2001/ Completed } \\ 10 \text { Dec 1999/ } \\ \text { Completed } \\ \hline \end{gathered}$ | $\begin{array}{r} 40 \\ 0.6 \end{array}$ |
| Institutional Support in the Transport Sector | TA | 31 Oct 2001/ Completed | 0.65 |
| Strengthening Capacity in the Ministry of Finance for Financial Management and Planning of the Public Investment Program, Phase II | TA | 13 Nov 2001/ Completed | 0.6 |
| Strengthening Corporate Governance and Judicial Reforms | TA | 22 Nov 2001/ Completed | 0.85 |
| Second Phase of the Corporate Governance and Enterprise Reform Program | $\begin{gathered} \hline \text { Loan } \\ \text { TA } \end{gathered}$ | 22 Nov 2001/ Completed 28 Sep 2000/ Completed | $\begin{array}{r} 35 \\ 0.7 \end{array}$ |
| Strengthening Capacity in the Office of the President, Phase II | TA | 24 Apr 2002/ Completed | 0.5 |
| Customs Modernization and Infrastructure Development | TA | 29 Oct 2002/ Completed | 0.5 |
| Strengthening the Capacity to Manage and Monitor Externally Assisted Projects | TA | 21 Nov 2002/ Completed | 0.58 |
| Capacity Building for Savings and Credit Union and Microfinancial Systems | TA | 19 Dec 2002/ Completed | 0.55 |
| Financial Sector Program II | TA | 19 Dec 2002/ Completed | 0.6 |
| Education Development | TA | 21 Aug 2003/ Completed | 0.6 |
| Institutional Development for Community-Based Early Childhood | TA | 29 Sep 2003/ Completed | 0.5 |
| Community-Based Early Childhood Development | $\begin{gathered} \hline \text { Loan } \\ \text { TA } \end{gathered}$ | 29 Sep 2003/ Approved 23 Mar 2000/ Completed | $\begin{array}{r} 10.5 \\ 0.7 \end{array}$ |
| Emergency Rehabilitation Project | Loan | 11 Dec 2003/ Completed | 5 |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Reducing Neonatal Mortality | Grant | 8 Sep 2004/Approved | 1 |
| Reducing Vulnerability of the Poor to Natural Disasters | Grant | 8 Sep 2004/Approved | 1 |
| The Study on Pricing Systems and Cost-Recovery Mechanisms for Irrigation | TA | 11 Oct 2004/ Completed | 0.3 |
| Agricultural Strategy Formulation | TA | 12 Oct 2004/ Completed | 0.6 |
| A Study of the Impact of Land Reform on Agriculture, Poverty Reduction, and Environment | TA <br> TA(additional) | 12 Oct 2004/ Completed 25 Jan 2006/ Completed | $\begin{array}{r} 0.4 \\ 0.13 \end{array}$ |
| Second Agriculture Area Development | TA | 19 Nov 2004/ Completed | 0.8 |
| Awareness and Prevention of HIV/AIDS/STI and Human Trafficking | TA | 23 Nov 2004/ <br> Terminated/ Cancelled | 0.5 |
| Improving Road Maintenance and Strengthening the Transport Corridor Management Department | TA | 23 Nov 2004/ Completed | 0.8 |
| Southern Transport Corridor Road Rehabilitation Project | Loan | 23 Nov 2004/ Approved | 32.8 |
| Capacity Building and Institutional Strengthening for Customs Modernization and Infrastructure Development | TA | 26 Nov 2004/ Approved | 0.5 |
| Rural Livelihood Development | Grant | 15 Dec 2004/ Approved | 1 |
| Vocational Education and Skills Training Project | TA | 24 Oct 2005/ Completed | 0.3 |
| Second Education Project | Grant | 27 Oct 2005/ Approved | 15.5 |
| Preparing the Reform and Modernization of Revenue Administration Project | TA | 4 Nov 2005/ Completed | 0.5 |
| Support to the Development and Implementation of National Poverty Reduction Strategy II | TA | 29 Nov 2005/ Completed | 0.4 |
| Banking Sector and Capital Market Development Program | Loan | 20 Dec 2005/ Approved | 15.5 |
| Supporting Banking Sector and Capital Market Development | TA | 20 Dec 2005/ Completed | 0.6 |
| Community-Based Early Childhood Development II | TA | 7 Jun 2006/ Completed | 0.4 |
| Development of a Monitoring and Evaluation System at Oblast Level | TA | 16 Jun 2006/ Approved | 0.3 |
| Improving Livelihoods of Rural Women through Development of Handicrafts Industry | Grant | 17 Jan 2007/ Approved | 2 |
| Southern Agriculture Area Development Project | Grant Grant <br> Loan | 29 Jan 2007/ Approved 15 May 2008/ <br> Terminated/ Cancelled 29 Jan 2007/ Approved | $\begin{array}{r}5 \\ 2.5 \\ 15 \\ \hline\end{array}$ |
| Vocational Education and Skills Development | Grant | 29 Jan 2007/ Approved | 10 |
| Preparing the Agricultural Land Improvement Project | TA | 23 Mar 2007/ Approved | 0.7 |
| Improving Access to Quality Basic Education for Children with Special Needs | Grant | 28 May 2007/ Approved | 1 |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Institutional Strengthening and Capacity Building for Tax Administration Reform | TA | 14 Jun 2007/ Approved | 0.5 |
| Tax Administration Reform and Modernization Project | Grant | 14 Jun 2007/ Approved | 10 |
| Business Process Reengineering and Change Management for Tax Administration Modernization | TA | 14 Jun 2007/ Approved | 0.5 |
| Investment Climate Improvement Program | $\begin{aligned} & \text { TA } \\ & \text { TA } \end{aligned}$ | Proposed <br> 7 Mar 2008/ Approved | 0.5 |
| Implementation Support for Investment Climate Reform | TA | 3 Nov 2008/ Approved | 0.6 |
| Investment Climate Improvement Program (Subprogram 1) | Grant | 3 Nov 2008/ Completed | 12.5 |
| Investment Climate Improvement Program System Support Project | Grant | 3 Nov 2008/ Approved | 2.9 |
| CAREC Transport Corridor 1 (Bishkek Torugoart Road) | $\begin{gathered} \hline \text { Grant } \\ \text { TA } \end{gathered}$ | 14 Nov 2008/ Approved 4 Mar 2008/ Completed | $\begin{array}{r} 20 \\ 0.15 \end{array}$ |
| Issyk-Kul Sustainable Development Project | Grant <br> Loan <br> TA | Proposed Proposed 20 Jan 2009/ Approved | 0.8 |
| Investment Climate Improvement Program (Subprogram 2) | Grant <br> Loan | Proposed <br> Proposed |  |
| Investment Climate Improvement Program (Subprogram 3) | Grant <br> Loan | Proposed <br> Proposed |  |
| Investment Climate Improvement Program SP2 | TA | Proposed |  |
| CAREC Corridor I (Bishkek - Torugart) Ph2 | Grant <br> Loan | Proposed <br> Proposed |  |
| Regional Trade Facilitation and Customs Cooperation Program | Loan | - /Completed | - |

Source: ADB website (http://www.adb.org/Projects/ as of June 2009)

## - European Bank for Reconstruction and Development (EBRD)

EBRD prepared a currently effective country assistance strategy for Kyrgyz in June 2007. In the strategy, the following 4 issues are prioritized: a. private sector development; b. strengthening of the financial sector; c. support for key infrastructure development; and d. policy dialogue. Regarding private sector development, EBRD puts particular importance on the development of private enterprises in the sectors of agribusiness, real estate, tourism, natural resources and consumer services. For strengthening of the financial sector, EBRD supported the introduction of new financial products. In key infrastructure development, the Bank engaged in assistance for reformed sectors such as electricity and gas, and municipal services including waste management, water supply and urban transport, which are not directly managed by the central government. In policy dialogue, EBRD focused on improvement of the investment climate.

Table 3-38 EBRD Projects in Kyrgyz

| (Unit: million USD) |  |  |  |
| :---: | :---: | :---: | :---: |
| Project | public/private | Approval date/ Status | Amount |
| Talas Transmission Network Improvement Project | public | $1995 / 12$ <br> Completed | $\begin{array}{lr}  & 24.7 \\ (+\quad \text { Switzerland } \\ + \text { EUTACIS }) \end{array}$ |
| Joint Venture Italkyr CJSC | private | 4 November 1997 | 8 |
| Enterprise investment Demonstration | private | 16 December 1997 Completed | 7 |
| Kyrgyzstan - SME Line of Credit II | Private | 30 June 1998 Completed | 20 |
| Kyrgyz Investment and Credit Bank (KICB) (debt \& equity) | private | 13 July 2000 | 1.4 |
| Kyrgyzstan Micro Finance Facility | private | 26 February 2002 | 7 |
| Kyrgyz Republic - Inexim Bank equity participation | private | 30 September 2003 Completed | 57.5 million KGS |
| Interglass LLC | private | 2 November 2004 | 5.5 million EUR |
| Raduga - II | private | 3 March 2005 Completed | 6 |
| Kyrgyz MSE Finance Facility II | Private | 4 May 2005 | 20 |
| Kyrgyz Republic - Inexim Bank equity increase | private | 4 October 2005 Completed | 62.5 million KGS |
| OJSC Aiyl Bank | private | 1 November 2005 | 7 |
| Kyrgyz Financial Sector Framework | private | 3 December 2007 | 40 |
| Bishkek Water Supply Project | Public | 6 May 2009 (Scheduled) | 5.4 million EUR |
| Osh-Isfana Road Upgrading Project | Public | 14 July 2009 (Scheduled) | 35 |

Source EBRD website (http://www.ebrd.com/projects/psd/country/kyrgyz.htm as of June 2009)

## - United States Agency for International Development (USAID)

Since 1992, USAID has provided assistance of more than 400 million US dollars to Kyrgyz. As is the case for other countries, a. economic growth, b. investing in people, c. governing justly and democratically, are the three pillars of USAID assistance to Kyrgyz. In particular, for economic growth, USAID prioritizes development of the business environment through support for microfinance, small and medium enterprises, the banking sector, government finance, the tax system, issues related to WTO, and so forth. Also USAID assists the agriculture and energy sectors as a part of its assistance for economic growth. In its future strategy, USAID will implement a focus on Local Economic Development and Energy Sector Assistance. Local economic development aims at stimulating employment and the development of locally appropriate industries, including not only agriculture but also other potential industries. For investment in people, USAID assisted with the education sector through teacher training with the cooperation with ADB and WB. USAID will shift its priorities in the education sector to the improvement of the quality of higher education and vocational training while the importance
of education the sector is remains unchanged in the USAID strategy. For democratic and fair government, USAID implemented measures for the development of civil society and the mass media, training at the local government level and training for voting monitors.

Table 3-39 Activities of USAID in Kyrgyz (2009)

| Priority Issues | Projects |
| :---: | :---: |
| Economic Growth | (Promotion of economic policy reform) <br> -Strengthening fiscal management <br> - Decentralization <br> - Efficient tax administration <br> (Reduction of regulatory and administrative constraints for SMEs) <br> Facilitating dialogue between the government and the private sector <br> Streamlining legislation <br> Improvement of implementation of laws and regulations <br> (Expansion of regional trade) <br> - Support to the country's WTO-compliance process, focusing on reduction of trade barriers and increased access to market information within and beyond Central Asia <br> - Development of regional electricity markets and management reform for the country's electricity system <br> (Microfinance institutions) Improvement of the legal environment for lending <br> (Land market development) <br> - Streamlining land legislation <br> - Assistance for farmers in leasing, buying and selling land <br> - Facilitating the reform of state-owned land management <br> - Support for farmers to improvement agricultural production and management of the irrigation networks and on-farm water |
| Investing in people | (Increase of utilization and quality of primary health care services) <br> Support for the National Health Reform Program, Manas Taalimi <br> Parallel funding supports the SWAPs <br> - Training for health providers <br> - Assistance to development of national guidelines on infection prevention, implementation of the internationally recommended TB control strategy DOTS and development of treatment models for multi-drug resistant TB Grant aid for fighting AIDS, TB and Malaria <br> Capacity building of local NGOs working in the field of HIV/AIDS <br> Support the Government' effort to combat avian influenza <br> (Improvement of education at the primary and secondary school levels) <br> - Training for teachers to promote critical thinking and active learning <br> - Supports for education finance reform <br> - National Scholarship Test providing a fair opportunity for school graduates to receive state grants for higher education |
| Governing Justly and Democratically | Technical assistance and training to improve local governance Support for initiatives to strengthen civil society, the media, political parties and human rights organizations <br> Technical assistance for the Central Election Commission <br> Support for local communities to promote economic activities <br> Small grants to NGOs to strengthen private enterprise, civil society, public administration and education <br> Training for professionals from various sectors in the Unite States Assistance for the Kyrgyz Republic's Millennium Challenge Account Threshold Program for judicial reform |

[^21]- Germany

Germany has been the third most important bilateral donor following Japan and the United States from the point of view of total amount of ODA since 1991. Because Germany has strong political relations with Kyrgyz based on a historical background, it has provided social, cultural and educational assistance for German-origin residents. The main beneficiaries of the German Center in Bishkek, a social service center, are German residents. Also, a German loan program for private enterprises targets German companies.

Since the bilateral agreement between Kyrgyz and Germany in September 2007, Germany has prioritized support for transition to a market economy as the main pillar of bilateral cooperation. Germany also provide assistance for not only German residents but also for the entire Kyrgyz people through the health sector and the energy sector, supporting poor families as well as assisting in mitigation of the transition process to the market economy.

## 4 Development Needs and Issues in Tajikistan



Source: Economist Intelligence Unit, "Country Profile 2008 Tajikistan"

Figure 4-1 Map of Tajikistan

## 4-1 Development Strategy and Priorities

The Government of Tajikistan outlines its development strategies in two documents: the National Development Strategy (NDS) for 2015 and the Poverty Reduction Strategy for 2007-2009 (PRS 2). NDS defines long-term strategies for the country's development and sets priorities and directions to be achieved by 2015. PRS 2 presents the three-year plan to put into operation the country's long-term development vision laid out in the NDS 2015. This document was developed based on lessons learned from the first Poverty Reduction Strategic Paper 2002-2006 (PRS 1). Both NDS and PRS are comprehensive strategies and portray common goals and priorities for the country's development.

## 4-1.1 National Development Strategy 2015

The President of the Republic of Tajikistan initiated the drafting of NDS, aiming to achieve the objectives set in the Millennium Development Goals. National goals and priorities of NDS are described in Table 4-1.

Table 4-1 Poverty Reduction Goals (2007-2009)

| National Goals | To strengthen social and political stability and to achieve the economic <br> prosperity and social well-being of the people of Tajikistan in an environment <br> shaped by the supremacy of the principles of a market economy, freedom, <br> human dignity and equal opportunities for each person to realize his or her <br> potential |
| :---: | :--- |
| National Priorities | Reform of public administration <br> Development of the private sector and attraction of investment <br> Development of human potentials |

Source: National Development Strategy for 2015

NDS is composed of the following three blocks, in line with its key strategic directions: 1) a functional block ${ }^{19}$, 2) a production block ${ }^{20}$, and 3) a social block ${ }^{21}$. Each block identifies core problems, development priorities, key areas of activity and anticipated results.

## 4-1.2 Poverty Reduction Strategy 2007-2009

PRS 2 is integrated with the Medium-Term Budget Framework (MTBF), the Public Investment Programme (PIP) and medium-term foreign aid programmes of donor organizations.

As in NDS, PRS 2 is organized into three blocks. Each block addresses core problems, goals, and measures being taken to achieve the goals. Each also describes budget allocations and plans for foreign financial assistance and investment. However, the Joint Advisory Note formed by the World Bank (WB) and the International Monetary Fund (IMF) commented that more needs to be done to ensure that program costing is realistic and that budget allocations reflect PRS2 priorities. In addition, the note pointed out that PRS2 draws an incomplete picture of the dynamics and dimensions of poverty in Tajikistan and of corruption measures.

Table 4-2 Poverty Reduction Targets (2007-2009)

| Indicator | Baseline level <br> $(2005)$ | Target <br> $(2009)$ |
| :--- | :---: | :---: |
| GDP per capita | $402.1(2006)$ | 485.5 |
| Average annual GDP growth (\%) | $7.0(2006)$ | 7.0 |
| Average annual inflation (\%) | $12.5(2006)$ | $6.0-7.0$ |
| State budget surplus/deficit (not including the PIP) (\%) | +0.3 | -1.0 |
| Poverty rate (\$2.15 PPP) | $64.0(2003)$ | 52.0 |
| Extreme poverty rate (\$1.08 PPP) | $18.0(2003)$ | 10.0 |

[^22]| Indicator | Baseline level (2005) | $\begin{aligned} & \text { Target } \\ & \text { (2009) } \end{aligned}$ |
| :---: | :---: | :---: |
| Contribution of private sector to GDP (\%) | 43.0 | 55.0 |
| Annual increase in gross private investment (other than investment in the primary sector) (\%) | 100.0 | 110.0 |
| Growth in gross agricultural output (\%) | 103.1 | 120.0 |
| Growth in industrial output (\%) | 100.0 | 125.6 |
| Overall basic secondary education coverage (\% of total number of children of the relevant age) | 97.0 | 98.0 |
| Mortality rate among children under the age of 5 (per 1,000 live births) | 79 (MICS-3) | 75 |
| Infant mortality (per 1,000 live births) | 65 (MICS-3) | 62 |
| Maternal mortality (per 100,000 people) | 97 | 70 |
| Number of people infected with HIV | 627 (2006) | less than 2,500 |
| Incidence of disease (per 100,000 people) : <br> Malaria <br> Tuberculosis (source: WHO) <br> Parasitic diseases <br> Measles | $\begin{gathered} 37.4 \\ 177(2004) \\ 292.9(2004) \\ 0.0 \end{gathered}$ | $\begin{gathered} 20 \\ 145 \\ \text { less than } 292.9 \\ 0.0 \end{gathered}$ |
| Proportion of urban/rural population with regular access to high-quality water sources (\%) | 93.0/49.0 | 96.0/51.0 |
| Proportion of urban/rural population with access to basic sanitation and hygiene services (\%) | 20.0/5.0 | 47.0/37.0 |
| Area of land covered by forests as a proportion of total land area (2005-100\%) | 100.0 | 105.0 |
| Percentage of economically active population by gender (m/f) | 58.3/41.7 (2004) | $\begin{gathered} \text { 57.8/42.2 } \\ \text { (preliminary } \\ \text { estimates) } \end{gathered}$ |

Source: Republic of Tajikistan, "Poverty Reduction Strategy 2007-2009"

## 4-2 Analysis of Major Sectors

## 4-2.1 Power

## - Current Conditions

Tajikistan is rich in water resources and its installed hydropower generation capacity is the largest among the Central Asian countries. The country's total power generation capacity amounts to 4,377 MW, out of which, $4,059 \mathrm{MW}$ is generated at hydro power plants. Hydropower generation covers almost $99 \%$ of the $15,244 \mathrm{GWh}$ total power generation. The country's power supply at times becomes critical. Its consumption volume reaches 15,291 GWh, exceeding the current supply level. Hydropower is mainly used for refining and exporting aluminum, the country's largest industry. Power supply to the public relies on electricity imported from Uzbekistan and Turkmenistan and thermal power. However, the source does not meet the demand during the peak season in the winter and the country faced severe power shortages in the winter of 2008.

Table 4-3 Summary of Power Generation

| Installed Capacity (MW) | 4,377 |
| :--- | ---: |
| Hydropower (MW) | 4,059 |
| Thermal power (MW) | 318 |
| Power Generation (GWh) | 15,244 |
| Hydropower (GWh) | 15,086 |
| Thermal power (GWh) | 138 |
| Power Generation Capacity (MW) | 3,438 |
| Peak Demand (MW) | 2,512 |
| Power Consumption (GWh) | 15,291 |

Source: Japan International Cooperation Agency (JICA) and Ministry of Foreign Affairs (MoFA), "Study on Power Generation and Regional Cooperation on Water Resources in Central Asia" (2009), table 3-1 in page 3-4

In Tajikistan, Barki Tojik, a state-owned power company, controls power generation, transmission, and distribution, except in somonie parts of the country. In the Gorno Badakshan Autonomous Region (GBAO), the privately owned Pamir Energy Company was given a 25 year concession on the entire electrical power utilities at the end of 2002. Since then, the Pamir Energy Company has functioned as a vertically integrated utility in GBAO. Power sector assets in the rest of the country still remain with Barki Tojik.

Barki Tojik comprises a State Joint Holding Company (SJHC) and its 28 subsidiaries, including a number of power generation companies, one subsidiary transmission company, 11 distribution subsidiaries, maintenance and construction companies, and a research institution. Legally, power generation, transmission and distribution have to be handled by different companies. However, in fact, Barki Tajik is operating as one integrated unity. Furthermore, Sangtuda I Joint Stock Company was formed for a hydropower plant construction project in Sangtuda and the joint stock company is expected to operate the power plant.


Source: WB, "Central Asia Regional Electricity Export Potential Study", (2004)
Figure 4-2 Structure of Power Supply Industry in Tajikistan in 2002


Source: JICA and MOFA "Study on Power Generation and Regional Cooperation on Water Resources in Central Asia", 2009, Figure 3-1 on 3-2page

Figure 4-3 Electricity Supply and Demand in Tajikistan

Six hydropower facilities have been constructed and located along the Naryn River, a tributary of the Syr Darya River and on the Vaksh River, a tributary of the Amu Darya River. Tajikistan accounts for $45 \%$ of the hydropower generation capacity in Central Asia. Tajikistan’s biggest hydropower plant at Nurek has a world-class wall with a height of 300 meters and its generation capacity is the largest in Central Asia, reaching 3,000MW. However, most of the hydropower stations were built during 1950s and 60s; and even the newest plant in Baipaza was constructed in 1984. These decrepit plants have been operating for more than 20 years.

Meanwhile, as for thermal power generation, the country's only, and dilapidated, thermal plants in Dushanbe and Yanvan produce less than 300 MW.

Table 4-4 Major Power Plants in Tajikistan

|  | Name of Plant | Installed <br> (MW) | Generation <br> (Billoin kWh) | Fuel Type | Operation |
| :--- | :--- | ---: | :---: | :--- | :---: |
| Hydropower | Kairakum | 126 |  | - | 1957 |
|  | Nurek | 3,000 |  | - | 1972 |
|  | Baipaza | 600 |  | - | 1984 |
|  | Golobnaya | 240 |  | - | 1962 |
|  | Perepadnaya | 30 |  | - | 1958 |
|  | Central | 15 |  | 1964 |  |
| Thermal power | Dushanbe TPP | 198 |  | 1955 |  |
|  | Yanvan TPP | 120 | - | Oil / Gas | 1969 |

Source: JICA and MOFA "Study on Power Generation and Regional Cooperation on Water Resources in Central Asia", 2009, Table 3-2 on 3-5page and Table 3-3 on 3-6 page

The current regional transmission network was installed during the Soviet era. The transmission line from Uzbekistan connects Tajikistan with other Central Asian countries but this does not meet the present needs after the independence. New transmission lines need to be constructed in order to export power economically to surrounding countries. Currently a transmission line through which the power from Tajikistan and Kyrgyzstan will be exported to Pakistan and Afghanistan is under planning and a construction project to connect Tajikistan directly to Kyrgyzstan instead of via Uzbekistan is in progress.

Table 4-5 Central Asian Power System (Uzbekistan to Tajikistan)

| Transmission Line | Point 1 | Point 2 | Voltage <br> $(\mathrm{kV})$ | Total Length <br> $(\mathrm{km})$ | Capacity <br> $(\mathrm{MVA})$ |
| :--- | :--- | :--- | :---: | :---: | :---: |
| L-507 | Guzar SS | Regar SS | 500 | 250.30 | 2,000 |
| L-508 | Surkhan SS | Regar SS | 500 | 162.30 | 2,000 |
| L-Rundaki | Sary-Bazar SS | Rundaki SS | 220 | 86.00 | 314 |
| L-Samarkand | Samarkand SS | Rundaki SS | 220 | 86.35 | 314 |
| L-R-Sh | Sherabad SS | Regar SS | 220 | 49.50 | 118 |
| L-R-G | Gulsha SS | Regar SS | 220 | 45.00 | 118 |

Source: JICA and MOFA "Study on Power Generation and Regional Cooperation on Water Resources in Central Asia", 2009, Table 3-4 on 3-7page

## - Development Issues and Policies

With abundant water resources, Tajikistan identifies new hydropower plant construction as an immediate priority. This aims not only to meet the domestic power demands but also to acquire foreign currency by exporting electricity, given the poor mineral resources of the country.

Tajikistan has developed only $5 \%$ of its total potential hydropower capacity of 317,000 GWh, and the remaining $301,914 \mathrm{GWh}$ is still underdeveloped. However, there are numerous conditions to be taken into consideration when selecting a location for a new hydropower plant, such conditions as river stream formation, landscape, and geological conditions. In addition, physical accessibility to the potential market should not be ignored from an economic point of view. Therefore, site options for a new plant are limited. However, Tajikistan still has the potential to provide $117,700 \mathrm{GWh}$, nearly same volume as the overall power demand in Central Asia.

Somonie new hydropower plants are currently under construction. The Sangtuda I Hydropower Plant is scheduled to start operations in 2009 and the Sangtuda II Hydropower Plant in 2010. Each plant is equipped with a 670 MW generation capacity and a 220 MW capacity, respectively. Rogun Hydropower Plant No. 1 and 2 stations at Rogun are scheduled to be on line from 2012. The construction of these was initially started in 1976 during the Soviet regime, but was suspended until 2007 and resumed in February 2007 with financial assistance from Russia. The Rogun plant is designed with a 3,600 generation capacity, and its capacity is beyond the Nurek Hydropower Plant. The construction of the Rogun plant is estimated to cost approximately 2 to 6 billion dollars.

Hydropower reservoir development projects upstream on the Amu Darya River aim to utilize water resources in Amu Darya and to handle somonie flood prevention measures in the downstream areas. However, Uzbekistan, located downstream, disagrees with the development project. More coordination is required to reach a consensus on water resource development.

Table 4-6 Hydropower potential in Tajikistan

| Name of River | Hydropower Potential | Development Potential <br> (with technical and <br> economic feasibility) | Development potential <br> $(\%)$ |
| :--- | ---: | ---: | :---: |
| Piyanj | $122.9 \times 1000 \mathrm{GWh}$ | $82.0 \times 1000 \mathrm{GWh}$ | $67 \%$ |
| Kafirnigan | $37.2 \times 1000 \mathrm{GWh}$ | $8.7 \times 1000 \mathrm{GWh}$ | $23 \%$ |
| Surhob/Obihingoy | $26.3 \times 1000 \mathrm{GWh}$ | $16.4 \times 1000 \mathrm{GWh}$ | $62 \%$ |
| Zaravshan | $33.9 \times 1000 \mathrm{GWh}$ | $10.6 \times 1000 \mathrm{GWh}$ | $31 \%$ |
| Total | $220.3 \times 1000 \mathrm{GWh}$ | $117.7 \times 1000 \mathrm{GWh}$ | $53 \%$ |

Source: JICA and MOFA "Study on Power Generation and Regional Cooperation on Water Resources in Central Asia", 2009, Table 3-6 on 3-12page


Source: Tajikistan Ministry of Foreign Affairs
Figure 4-4 Potential for in Hydropower Development

Tajikistan covers its power supply shortfalls by importing electricity from Uzbekistan and Turkmenistan. The Tajikistan government signed a 5-year agreement with Turkmenistan for electricity imports and Turkmenistan transmits power by reconnecting itself with the Central Asian Power System (CAPS), from which the country withdrew itself since its independence. However, since Tajikistan, Uzbekistan and Turkmenistan have not signed an agreement on Turkmenistan's rejoining the CAPS, Turkmenistan's usage of CAPS remains uncertain. Furthermore, due to increasing domestic demands in Uzbekistan and Turkmenistan and soaring energy prices in recent years, in 2008, Tajikistan faced a drop in power supply from the two countries.


Source: WB, "Central Asia Regional Electricity Export Potential Study" (2004)
Figure 4-5 Tajikistan's Electricity Interconnections between North/South 500kV lines and CAPS in the south


Source: WB, "Central Asia Regional Electricity Export Potential Study", (2004)
Figure 4-6 New Transmission Lines Needed for Exports

At the same time, in order to expand export of electricity, improvement of the transmission lines to Central Asia and to other neighboring countries is required. Therefore, the construction of a 500 kV transmission line between Kambarata in Kyrgyzstan and Dushanbe in Tajikistan has started. A transmission line between Khujend and Dushanbe is under construction with a Chinese loan and will be completed in September 2009. In August 2008, Afghanistan agreed to import electricity from Tajikistan and the construction of a transmission line between the two countries has been started. Construction on the Tajikistan side will be started in 2009.


Source: ADB, "Study for Power Interconnection for Regional Trade", (2003)
Figure 4-7 Afghanistan's Cross-Border Electricity Interconnections

Almost $40 \%$ of Tajikistan's electricity goes to TALCO, a state-owned aluminum company. Since the price setting offered to TALCO is unclear, this is assumed to be one of reasons for the downturn in Barki Tajik's business. Electricity supply for the public and residential consumers depends on imports from Uzbekistan and Turkmenistan and thermal power generated by natural gas imported from Uzbekistan. This dependency makes Tajikistan vulnerable to global fuel prices. With the global fuel price increase, Barki Tajik announced that it would gradually raise the residential electricity price from 0.6 cents/kWh in 2007 up to 2.5 cents/kWh by 2010. In 2008 , the price increased by an average of $45 \%$. In some areas, prices were raised two to three times higher than in 2007.

Furthermore, according to a WB report ${ }^{22}$, although more than $90 \%$ of consumers installed a power meter, most of the meters are not functioning properly. This accounted for commercial losses, amounting to $1,816 \mathrm{GWh}$ in 2004. Out of this, losses of $1,257.8 \mathrm{GWh}$ occurred in the supplies to residential consumers. WB is currently supporting a project to improve the supply network to reduce such distribution losses.

## - Donors’Assistance

To support the electricity sector, WB, the Asian Development Bank (ADB) and other donors provides loans and grants.

WB finances the Pamir Private Power Project to improve the power supply to GBAO, and the Energy Loss Reduction Project to mitigate power distribution losses and improve the billing system for electricity and gas. In addition, likewise for Kyrgyzstan, WB approved the Energy

[^23]Emergency Assistance Project in April 2008, upon an urgent appeal from the Tajikistan government. Unexpected cold weather during the winter, water shortages, and an insufficient electricity and gas supply brought a severe shortage of energy to the country. Given the severity of the situation, the government formulated the Energy Emergency Mitigation Action Plan (EEMAP). WB aims to assist implementing EEMAP and improve Tajikistan's energy security. Below are objectives articulated in EEMAP.
$>$ Rehabilitating the existing thermal and heat energy supply system in the shortest possible time frame
> Initiating institutional and technical measures to enable an increase in the amount and the reliability of energy supplied to the population during the next two winter seasons.
> Formulating medium and long term action plans to improve national energy security.
ADB, as the other main financial institution, provides loans to the Power Rehabilitation Project (approved in December 2000), the Power Rehabilitation Project II (approved in December 2006), and the Nurek 500kV Switchyard Rehabilitation Project (approved in 2008). It also offers a grant for the Community-Based Rural Power Supply Project, which aims to supply electricity to rural communities in remote areas. Furthermore, ADB provides technical assistance to such actions as the Hydropower Development Strategy, the Development of Energy Conservation Program, and for improving Barik Tajik's billing and fare correction system.

As for the reinforcement of hydropower capacity, Russia and Iran are supporting Tajikistan. Russia finances the construction projects at Sangtuda I Hydropower Plant (670MW) and Rogun Hydropower Plant (3,600MW). Iran is supporting the construction of Sangtuda II (220MW).

In addition, in order to strengthen the regional energy transmission network, international financing institutions such as ADB, the World Bank, IFC, IsDB and EBRD are supporting the CASA 1000 project, which will promote power exporst from Central Asia to South Asia. The CASA 100 Project will include a 750km High Voltage Direct Current (DC) transmission system between Tajikistan and Pakistan via Afghanistan, and an Alternate Current (AC) link between the Kyrgyz Republic and Tajikistan to supply Kyrgyz electricity to South Asia via Tajikistan.

Table 4-7 Main Projects Financed by Donors

| Donor | Name of Project | Approval | Outline of Project |
| :---: | :--- | :---: | :--- |
| WB | Pamir Private Power Project | 2002 <br> (on-going) | Improvement of electricity supply to GBAO |
|  | Energy Emergency <br> Assistance Project | 2008 <br> (on-going) | Rehabilitation of thermal and heat energy <br> supply system, actions to prepare for power <br> demand in winter for the next two years, <br> preparation of mid and long term action <br> plans |
| ADB | Power Rehabilitation Project <br> I, II | $2000 \cdot 2006$ <br> (completed) | Rehabilitation of the Nurek Hydropower <br> Plant and its transmission/distribution <br> network, rehabilitation of the main <br> distribution system in Dushanbe |
|  | Nurek 500kV Switchyard <br> Rehabilitation Project | 2008 | Rehabilitation of Nurek Substation |
|  | Community-Based Rural <br> Power Supply Project | 2006 <br> (on-going) | Provision of electricity to rural communities <br> in remote areas |


| Donor | Name of Project | Approval | Outline of Project |
| :---: | :--- | :---: | :--- |
|  | Hydropower Development <br> Strategy | 2002 <br> (completed) | Formulation Support of a hydropower <br> development strategy |
|  | Development of Energy <br> Conservation Program | 2002 <br> (completed) | Formulation Support of energy-efficiency <br> programme development plan |
|  | Improving Barki Tajik's <br> Billing and Collection <br> System | 2004 <br> (completed) | Technical assistance to Barik Tojik on <br> billing and fare collection system |
|  | CASA 1000 Project | Plan | Kyrgyzstan-Tajikistan-Afghanistan-Pakistan <br> Transmission Line Construction Project |
|  | Sangtuda I Hydropower <br> Construction | on-going | Construction of Sangtuda I hydropower <br> plant with total of 670MW |
|  | Rogun Hydropower <br> Construction | on-going | Construction of hydropower plant with total <br> of 3,600MW |
| Iran | Sangtuda II Hydropower <br> Construction | on-going | Construction of Sangtuda II hydropower <br> plant with total of 220MW |

Source: Donor's website (WB, ADB, EBRD and IDB), and JICA report (2009)

## 4-2.2 Transport

- Current Conditions

With a land locked and mountainous landscape and a limited domestic market of a 6.8 million population, Tajikistan counts on remittance from migrant workers in neighboring countries and from international trades in its national revenue. This makes the transportation sector crucially important for the country. Road is the dominant surface mode of transport for the movement of both people and goods. It accounts for $99.8 \%$ of freight transportation and $96.6 \%$ of passenger transportation. As for international transportation, railway operates as a dominant mode, accounting for $32 \%$ of passenger and $95.9 \%$ of freight movement, while road transportation accounts for $25.9 \%$ of passenger and $3.5 \%$ of freight transportation. However, the trend since 2002 shows a rapid growth in road transport.

As for freight transport, road transportation reached 2.55 millon tons in 2006, which was 1.8 times higher than in 2002, while rail transportation increased to 1.39 million tons in 2006, $20 \%$ up from 1.16 million tons in 2000. Air transportation remains between 2,000 to 4,000 tons. As for to passenger transport, the road transport is clearly the dominant mode, accounting for $99 \%$ of the entire passenger transportation. Movement by road reached 390 million passengers in 2006, growing by 260\% from 150 million people in 2000.

Table 4-8 Freight and Passenger Transport by Mode (2000-2006)

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| :--- | ---: | ---: | :---: | :---: | ---: | ---: | ---: |
| Freight Transport (thousand ton) |  |  |  |  |  |  |  |
| Road | 14,573 | 17,296 | 23,713 | 20,881 | 23,073 | 26,067 | 25,539 |
| Rail | 11,638 | 13,102 | 12,714 | 11,777 | 11,721 | 12,268 | 13,938 |
| Air | 2.0 | 2.5 | 2.4 | 3.8 | 4.1 | 3.7 | 2.4 |


|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| :--- | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| Passenger Transport (million passengers) |  |  |  |  |  |  |  |
| Road | 150.2 | 170.9 | 224.8 | 264.4 | 339.0 | 397.2 | 392.6 |
| Rail | 1 | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.8 |
| Air | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 0.5 |

Source: ADB, "Technical Assistance Consultant’s Report, Republic of Tajikistan: Transport Sector Master Plan" (2009)
Note: the figures for 2006 are based on estimation

Freight volume ( $\mathrm{t} / \mathrm{km}$ ) reached 2,302.5 million ton km in 2006, a $130 \%$ increase from 2002, with the expansion of international trade. Of this, road and railway transportation accounted for $47 \%$ and $46 \%$ respectively in 2006. However, given that railway transportation decreased from 1,282 million ton km in 2000 to 1,063 million $\mathrm{t} / \mathrm{km}$ in 2006, and road transportation grew by $260 \%$ from 422.7 million t/km during the same period, it can be seen that road transportation has become the leading factor in accelerating international trade.

In addition, road transportation has become the dominant mode for passenger movement. It has shown the highest growth rate with a more than $400 \%$ increase from 1,179 million passenger km in 2000 to 4,974 million passenger km in 2006.

Table 4-9 Freight and Passenger Turnover by Transport Mode

| Transportation <br> Mode | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Freight Transport (million ton km) |  |  |  |  |  |  |  |
| Road | 422.7 | 353.8 | 531.5 | 694.5 | 971.9 | $1,153.7$ | $1,083.3$ |
| Rail | $1,282.0$ | $1,326.0$ | $1,250.0$ | $1,086.0$ | $1,086.0$ | $1,118.0$ | $1,063.0$ |
| Air | 4.3 | 5.1 | 5.7 | 8.1 | 8.2 | 7.6 | 5.2 |
| Total | $1,753.0$ | $1,608.9$ | $1,623.2$ | $1,788.6$ | $2,098.1$ | $2,224.3$ | $2,302.5$ |
| Passenger Transport (million passenger km) |  |  |  |  |  |  |  |
| Road | 1,179 | 1,703 | 2,377 | 3,335 | 4,134 | 4,963 | 4,974 |
| Rail | 73 | 33 | 42 | 50 | 50 | 46 | 51 |
| Air | 302 | 605 | 884 | 906 | 1,152 | 1,033 | 809 |
| Total | 1,554 | 2,341 | 3,302 | 4,291 | 5,336 | 6,043 | 5,834 |

Source: ADB, "Technical Assistance Consultant’s Report, Republic of Tajikistan: Transport Sector Master Plan", (2009), TableB. 2 and TableB. 4
Note: Figures for 2006 are based on estimation
According to an ADB report ${ }^{23}$, in 2004, the total length of road and railway infrastructure in Tajikistan was $12,500 \mathrm{~km}$ and 500 km , respectively. Most of the road network was built during 1970s in the Soviet era. Due to the civil war which broke out after independence and which destroyed the existing infrastructure, to repeated natural disasters, lack of appropriate maintenance and renovations, road conditions in Tajikistan have deteriorated severely. As of 2007, it was estimated that approximately $60 \%$ to $80 \%$ of road infrastructure was beyond

[^24]maintenance-level and $75 \%$ of asphalt roads were totally or partly damaged. In such conditions, more than $48 \%$ of domestic road record a driving speed of 35 km per hour on in average. These obsolete road conditions makes road transportation inefficient.

Table 4-10 Rail and Road Transport Networks (2004)

| (Unit: $1,000 \mathrm{~km})$ |  |
| :---: | :---: |
| Rail | Road |
| 0.5 | 12.5 |

Source: ADB, "Central Asia: Increasing Gains from Trade Through Regional Cooperation in Trade Policy, Transport, and Customs Transit", (2006)

## - Development Issues and Policies

Given the crucial importance of the transport sector in Tajikistan, the government formulated a "Transport Sector Master Plan (2009)", supported by ADB. In the document, short/mid term directions were identified emphasizing improvements of road conditions in order to reduce transportation costs and time. In particular, it addressed the problems of international road networks to neighboring countries including China and important state roads are planned to be rehabilitated intensively to improve and strengthen the road network in Tajikistan.

The Ministry of Transport and Communication announced the following road rehabilitation and maintenance plan.

Table 4-11 Road Rehabilitation and Maintenance Plan

| Time frame | Road <br> Number | Route | Status | Estimated Cost |
| :---: | :---: | :--- | :---: | :---: |
| Short <br> $(2009-2014)$ | - | Dushanbe-Khujand-Charnak <br> (including Anzob and Sharistan <br> Tunnels) | On-going | US\$ 88.2 million <br> (the cost from <br> 2008 onwards) |
|  | IR04 | Shar-Shar and Chormarzak Tunnels | Plan to implement <br> $(2010-2012)$ | US\$ 90 million |
|  | - | 75km of a segment between Obi <br> Garm and Nurubad of a part of <br> Dushanbe - Karamik (Kyrgyz border) | Plan to implement <br> (2011-2014) <br> (or Rogun Dam <br> construction | US\$ 78.8 million |
|  | IR02 | Dushanbe -Turzungade and Uzbek <br> border | $2010 \sim 2014$ | - |
|  | IR13 | Kadibadam - Spitamen | $2010-2014$ | - |
|  | IR04 | Nurek - Dangara, Kulyob - <br> Kalaikhum, Rushon - Tuzkul | $2010-2014$ | - |
|  | IR09 | Dushanbe -Obi Kiik, Kabidyan - <br> Ayvaj | $2010-2014$ | - |
| Medium | IR04 | Guliston -Dusti | Vahadat - Nurek, Guliston - Kulyob, <br> Kalaikhum -Rushon, Tuzkul -Murgab <br> - Kulma Pass | $2014-2019$ |


| Time frame | Road <br> Number | Route | Status | Estimated Cost |
| :---: | :---: | :--- | :---: | :---: |
|  | IR11 | Kizil Kala - Nijni Pyanj | $2014-2019$ |  |
|  | IR12 | Aini - Penjikent -Uzbek border | $2014-2019$ |  |
|  | IR05 | Murgab- Akbaital Pass -Kyrgyz <br> border | $2014-2019$ |  |
| Long <br> $(2019-2025)$ | IR15 | Isfara - Kyrgyz border | $2019-2025$ |  |
|  | IR17 | Isfara - Uzbek border | $2019-2025$ |  |
|  | IR03 | Labijar - Kalaikhum | $2019-2025$ |  |

Source: ADB, "Republic of Tajikistan: Transport Sector Master Plan",

Although the railway is strategically important for trans-boarder trade, since the current railway network has enough capacity to meet the estimated transportation volumes until 2025, the priority for railway development is not as high as that for road development. Thus, other external factors and the recovery of domestic industry will affect the progress of railway development. As for short term goals for 2009-2014, rehabilitation and maintenance of the existing railway infrastructure is identified as an important issues. Below are the detailed objectives.
$>$ Renewal of sleeping carriages and ballast and upgrade of rail tracks: at a cost of 25 million dollars
$>$ Repair and maintenance of bridges at 150 points: at a cost of 7.4 million dollars
> Upgrade of bronze cable of open-wired transmission lines between Khujand and Istikol: at a cost of 1.9 million dollars
$>$ Procurement and rehabilitation of 20 main tracks and 10 locomotives : at a cost of 180 million dollars
$>$ Procurement and renovation of freight wagons : at a cost of 20 million dollars
$>$ Purchase of crusher and sorting machines for the quarry at Korsshadi: at a cost of 0.4 million dollars

These proposed projects for the transport sector depend highly on foreign assistance, due to the Tajikistan's severe financial condition.


Source: ADB, "Republic of Tajikistan: Preparing the CAREC Transport Corridor III (Dushanbe-Uzbekistan Border Road) Project", (2008)

Figure 4-8 CAREC Transport Corridor in Tajikistan


Source：JICA，＂中央アジア地域貿易促進プロジェクト形成調査（一次調査）報告書＂（2007）
Figure 4－9 Grant Design of the Asian Highway Route in Tajikistan

## －Donors＇Assistance

ADB have been actively involved in Tajikistan＇s transport sector development．ADB provides loans for the Road Rehabilitation Project（approved in 2000）and the Dushanbe－Kyrgyz Boarder Road Rehabilitation Project I and II（approved in 2003 and 2005，respectively）．In 2007，the organization also assisted the CAREC Regional Road Corridor Improvement Project to rehabilitate roads between Dushanbe and the Uzbek border．Furthermore，ADB provides a grant for Community－Based Rural Road Maintenance，aiming to improve road accessibility to rural communities．In addition to these assistances，ADB supports the formulation of a master plan for the transport sector，which is a comprehensive development and maintenance plan for the sector．

Another donor，EBRD，provides loans for the Road Maintenance Development Project （approved in 2007）to support the Ministry of Transport and Communication in procuring necessary equipment for domestic road maintenance．It also provides loans for non－road transport activities，such as emergency airstrip repair at Khujand Airport（approved in 1999）and the modernization of the dilapidated Tajikistan State Air Navigation System and reconstruction of the aviation sector．In July 2009，EBRD is to approve a loan to Dushanbe Public Transport to rehabilitate trolley buses in Dushanbe and to reconstruct the system and the regulations of city public transportation．

Table 4-12 Main project financed by Major Donors

| Donor | Name of Project | Approval | Outline of Project |
| :---: | :---: | :---: | :---: |
| ADB | Road Rehabilitation Project | $\begin{gathered} 2000 \\ \text { (completed) } \end{gathered}$ | Rehabilitation of road between Dushanbe- Kurgan-Tube- DangaraKulob repair of farm roads, and provision of equipment |
|  | Dushanbe-Kyrgyz Border Road Rehabilitation Project I•II | $\begin{aligned} & 2003 \cdot 2005 \\ & \text { (on-going) } \end{aligned}$ | Rehabilitation of road between Dushanbe and Kyrgyz border |
|  | CAREC Regional Road Corridor Improvement Project III | $\begin{gathered} 2009 \\ \text { (plan) } \end{gathered}$ | Rehabilitation of road between Dushanbe and Uzbek border |
|  | Community-Based Rural Road Maintenance | $\begin{gathered} 2005 \\ \text { (on-going) } \end{gathered}$ | Improvement of road accessibility to rural communities |
|  | Transport Sector Master Plan | $\begin{gathered} 2007 \\ \text { (completed) } \end{gathered}$ | Support for formation of master plan for the transport sector (development and maintenance) |
| EBRD | Road Maintenance Development Project | $\begin{gathered} 2007 \\ \text { (on-going) } \end{gathered}$ | Procurement of necessary equipment for maintenance of domestic road infrastructure (Direct assistance to Ministry of Transport and Communications) |
|  | Khujand Airport | $\begin{gathered} 1999 \\ \text { (completed) } \end{gathered}$ | Emergency repair of airstrip at Khujand Airport |
|  | TSA Air Navigation System | $\begin{gathered} 2001 \\ \text { (completed) } \end{gathered}$ | Modernization of Tajikistan State Air Navigation System and reconstruction of the aviation sector |
|  | Dushanbe Public Transport | $\begin{aligned} & 2009 \\ & \text { (plan) } \end{aligned}$ | Rehabilitation of trolley buses in Dushanbe City and reconstruction of system and regulations of city public transportation |

Source: ADB, EBRD websites

## 4-2.3 Water Supply and Sanitation

## - Current Conditions

Tajikistan has abundant water resources like Kyrgyzstan. It had internal renewable surface and groundwater, amounting to 66 billion $\mathrm{m}^{3}$ per year in 2007. However, since Tajikistan has agreements with Kazakhstan and Uzbekistan, located in the downstream, to supply water for agricultural use, the total renewable water available for Tajikistan actually drops to 16 billion $\mathrm{m}^{3}$ per year. Renewable water per capita decreased by more than $19 \%$, from $2,896 \mathrm{~m}^{3}$ per year in 1992 to $2,373 \mathrm{~m}^{3}$ per year in 2007.

Total water withdrawal in 2002 was approximately 12 billion $\mathrm{m}^{3}$. This accounted for $74.8 \%$ of total renewable water, which was more or less same ratio as the $75.2 \%$ in 1992 . However, domestic water withdrawal per capita dramatically decreased from $87.9 \mathrm{~m}^{3}$ in 1992 to $69.6 \mathrm{~m}^{3}$ in 2002. As for water usage by sector, as of 2002, the agriculture sector consumed the majority of the water resources, accounting for $91.6 \%$. This was followed by $4.7 \%$ for industry use and $3.7 \%$ for residential use.

Table 4-13 Water Resources and Use

|  | 1992 | 1997 | 2002 | 2007 |
| :--- | ---: | ---: | ---: | ---: |
| Total renewable water * (billion m3 per year) | - | - | - | 16 |
| Internal renewable water ** (billion m3 per year) | - | - | - | 66 |
| Renewable water per capita (m3 per year) | 2,896 | 2,692 | 2,529 | 2,372 |
| Domestic water withdrawal per capita (m3 per year) | 87.9 | 69.4 | 69.6 | - |
| Annual withdrawal of ground and surface water <br> (\% of total renewable water) | 75.2 | 74.3 | 74.8 | - |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of May 2009)
Notes: 1 *The sum of internal renewable water resources and natural incoming flow originating form outside the country, taking into consideration the quantity of flow reserved for upstream and downstream countries through formal or informal agreements or treaties. This gives the maximum theoretical amount of water actually available for a country
Notes: 2** Internal renewable water is the average annual flow of rivers and the recharge of groundwater generated from endogenous precipitation

Table 4-14 Water Use by Sector

|  | 1992 | 1997 | 2002 |
| :--- | ---: | ---: | ---: |
| Total water withdrawal (billion $\mathrm{m}^{3}$ per year) | 12.0 | 11.9 | 12.0 |
| Domestic use | 4.0 | 3.5 | 3.7 |
| Use for Agriculture | 91.0 | 92.3 | 91.6 |
| Use for Industry | 4.9 | 4.2 | 4.7 |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of May 2009)

The share of population with access to improved sources of water was $67 \%$ of the total population in 2006, which had improved by $8 \%$ from $59 \%$ in 2003 . However, there was a gap between urban and rural areas. In 2003, $100 \%$ of urban population had access to improved sources of water, while less than $67 \%$ of rural population did. Although access to improved sources of water increased in rural areas year by year, in 2006, still more than $40 \%$ of the population in rural areas did not have access to improved water sources.

Table 4-15 Share of Population with Sustainable Access to Improved Sources of Water

|  | 1990 | 1995 | 2000 | 2006 |
| :--- | ---: | ---: | ---: | ---: |
| Rural (\%) | - | 42 | 47 | 58 |
| Urban (\%) | 91 | 92 | 93 | 100 |
| Total | - | 56 | 59 | 67 |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of May 2009)

As for sanitation facilities, 92\% of the total population in Tajikistan had somonie form of access to sanitation facilities in 2006, which was an improvement by more than $5 \%$ from $86 \%$ in 2000. According to the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), both urban and rural areas show similar improvement in access to sanitation and there is not such a big gap between the two. In 2006, $96 \%$ of urban dwellers had access to sanitation, while the figure was $91 \%$ in rural areas.

Table 4-16 Share of Population with Access to Improved Sanitation

|  | 1990 | 1995 | 2000 | 2006 |
| :--- | ---: | ---: | ---: | ---: |
| Rural (\%) | - | 81 | 84 | 91 |
| Urban (\%) | - | 88 | 91 | 95 |
| Total | - | 83 | 86 | 92 |

Source: United Nations Economic and Social Commission for Asia and the Pacific, "ESCAP Statistical Yearbook for Asia and the Pacific 2008", (ESCAP website: http://www.unescap.org/stat/data/ syb2008/, as of May 2009)

However, WB noted that deteriorating water quality and frequent water cuts, due to dilapidated and damaged water treatment plants and water pipes, had become an issue. A baseline survey report on the municipal infrastructure project said that there were huge gaps in water supply services among cities. In Rasht, $68 \%$ of population has at least 16 hours of water in both in summer and winter, while the figure is only $2 \%$ in Kanibadam. Dangara is the only city where more than $50 \%$ of population said they are satisfied with the current water supply services. In such cities as Istravshan and Rash, the figure is $13 \%$ of the population.

Although it is said that $100 \%$ of the population has access to improved water supplies in urban areas, the data in Table 6-17 shows a different reality.

Table 4-17 Municipal Water Supply Situation
(Unit: \%)

| City | Percentage of population having at <br> least 16 hours of water in both <br> summer and winter | Percentage of population rating water <br> supply service as satisfactory |
| :---: | :---: | :---: |
| Dangara | 60 | 56 |
| Istravshan | 24 | 13 |
| Kanibadam | 2 | 8 |
| Kulyab | 13 | 44 |
| Kurgun Tyube | 58 | 45 |
| Rasht (Gharm) | 68 | 13 |
| Vakshdat | 6 | 36 |
| Vose | 26 | 40 |

Source: World Bank, "Project Appraisal Document on A Proposed Grant to the Republic of Tajikistan for A Municipal Infrastructure Development Project", (2005), page. 25

## - Development Issues and Policies

In June 2006, the Ministry of Irrigation and Water Management launched a "Water Sector Development Strategy in Tajikistan", with the support of UNDP Tajikistan and the International Fund for saving the Aral Sea. This is to achieve MDGs and the objectives described in the UN resolution in the International Decade for Action "Water for Life" 2005-2015, passed at UN General Assembly in December 2003.

In Tajikistan, a state-owned company Khochagii Manziliu Kommunali (KMK) manages more than 180 local subsidiary utility enterprises throughout the country. Through the network of subsidiaries, KMK delivers such government services as water and sewage in urban areas, zonal heating, and waste disposal treatment. However, "Water Sector Development Strategy in Tajikistan" reports that the water supply and sanitation infrastructure has deteriorated by an estimated $70 \%$, due to lack of funding. The country is not able to maintain the facilities properly and there is not sufficient investment for rehabilitating existing facilities. In addition, the low water tariff and absence of water meters often contributes to water losses, amounting to an average 50 to $60 \%$. The following "Water Sector Development Strategy in Tajikistan" summarizes the major issues in water and sanitation, which are:
> Poor legal framework: It is necessary to develop a specific law concerning drinking water standards and the privatization of water supply services
> Inconsistent power supply and high depreciation of capital assets, as well as a deficit of hydropower equipment
> Deterioration of centralized heating systems in urban areas, which complicates the operation of the water supply and sanitation systems
> Absence of water meters and the limited ability of users to make service payments
> Lack of coordinated and targeted use of internal and external investment
> Practical inaction or a full absence of centralized canalization and utilization of solid domestic waste from individual and public toilets
> Low public awareness about proper water use and sanitation practices
Table 4-18 shows the short/mid term priorities to tackle the issues mentioned above.
Table 4-18 Water and Sanitation Sector Development Priorities


| 2006-2008 <br> (PRSP 2006-08) | 2006-2015 <br> (Water Sector Development Strategy in Tajikistan) |
| :---: | :---: |
| $\diamond$Development and adoption of the Law of the <br> Republic of Tajikistan "On Drinking Water and <br> Water Supply" | Increase of public awareness of the norms and <br> regulations regarding water use, sanitation and <br> hygiene |
| $\diamond$Elaboration of norms and standards for drinking <br> water quality |  |

Source: Ministry of Irrigation and Water Management, "Water Sector Development Strategy in Tajikistan", (2006)
Note: GOST STANDARDs were established by the Soviet Union for quality standardization in 1925, and were revised after the Second World War. After the collapse of the Soviet Union, the Euro Asian Interstate Council for Standardization, Metrology and Certification (EASC) took over the responsibility for managing the standards. Since the ISO has classified them as regional standards, Tajikistan applied the standards for the country's quality standardization

## - Donor's Assistance

WB and EBRD are the main donors for water supply projects in Tajikistan.
WB provides loans to the ongoing Dushanbe Water Supply Project (approved in 2002) and grants to the Municipal Infrastructure Development Project (approved in 2006), which aims to improve water supply and waste treatment in 8 cities in the western part of Tajikistan (Dangara, Istravshan, Kanibadam, Kulyab, Kurgun-Tyube, Rahst(Gharm), Vose and Vakhdat).

EBRD provides a loan for the Khujand Water Supply Improvement Projects I\& II (approved in 2004 and 2008, respectively), to support both the improvement of billing systems to collect usage fees by introducing water meters, as well as the improvement of water supply services by rehabilitating and reconstructing the existing water supply infrastructure.

Table 4-19 Main projects Financed by Major Donors

| Donor | Name of Project | Approval | Outline of Project |
| :---: | :--- | :---: | :--- |
| WB | Dushanbe Water Supply <br> Project | 2002 <br> (on-going) | Improvement of water supply in Dushanbe <br> Development Project |
|  | (on-going) | Improvement of water supply and waste disposal <br> (reatment in 8 regional towns in the west part of <br> Tajikistan (Dangara, Istravshan, Kanibadam, Kulyab, <br> Kurgun-Tyube, Rahst (Gharm), Vose, and Vakhdat) |  |
| EBRD | Khujand Water Supply <br> Improvement Project I• <br> II | 2004•2008 <br> (on-going) | Rehabilitation of the existing water supply facilities , <br> improvement of the water supply service through <br> capacity building, and improvement of the metered <br> billing system |

Source: WB, EBRD websites


Source: WB, "Project Appraisal Document on a Proposed Grant to the Republic of Tajikistan for A Municipal Infrastructure Development Project", (2005)
Figure 4-10 WB: Target Municipalities of Municipal Infrastructure Development Project

## 4-3 Macroeconomic and Fiscal Analysis

## 4-3.1 Macroeconomic Conditions

The Tajikistan economy showed rapid growth with an average at $10 \%$ in the early 2000 s. However, from 2005 to 2006, it slowed down the pace of an average 6\% growth. According to $A D B^{24}$, the growth rate is projected to recover and reach $7.9 \%$, in spite of somoni adverse elements.

The decline in aluminum and cotton production mainly resulted in a slowing down of the country's economy in 2008. The production of aluminum requires an adequate supply of electricity. In Tajikistan, electricity is generated by hydropower, made possible by its abundant water resources. However, in 2008, with an unusually rigorous winter and a decreased water level at reservoirs, there was not a sufficient amount of electricity generated and this shortage in the power supply led to a decline in aluminum production. The thin profit margin in cotton production, due to lumbering structure reform, is still an issue. In addition, declining in the cotton price has hindered the industry's growth. Growth in the food processing, construction material, and fiber industries increased only by $0.6 \%$ in 2008, was although these were the leading force in the economic growth of 2007. Overall, the industry sector ended in a negative growth of $4 \%$, due to the aluminum production slow-down.

The agriculture sector expanded from $6.5 \%$ in 2007 to $7.9 \%$ in 2008, thanks to an increased output in non-cotton products such as livestock, fruit and vegetables. The services sector also showed a rapid increase. Construction, trade, and finance are the main boosters for growth. In particular, the construction industry demonstrated the sharpest growth with on-going infrastructure projects supported by national and foreign funds.

GDP growth by sector indicates that the service sector expanded rapidly, accounting for a $50.2 \%$ of total GDP in 2007, having increased $14 \%$ from the $35.9 \%$ of 2003 . The agriculture and industry sectors shrank in their share of GDP.

The global price upsurge in energy and cereals hits also Tajikistan economy. Since 2006, the inflation rate has been rising, in contrast with the low, one digit, inflation rate in 2004 and 2005. In 2007, the consumer price index reached $19.7 \%$ and food price index showed a more rapid increase at $25.5 \%$. Although the average inflation rate of 2008 remained high at $20.7 \%$, it fell to $11.9 \%$ at the end of year from $19.9 \%$ at the beginning of the year.

Table 4-20 Macroeconomic Indicators for Tajikistan (2003-2007)

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Nominal GDP <br> (million somoni) (market price) | $4,761.4$ | $6,167.2$ | $7,206.6$ | $9,335.2$ | $12,779.7$ |
| GDP share by sector (\%) |  |  |  |  |  |
| Agriculture | 27.0 | 21.6 | 23.9 | 24.2 | 22.4 |
| Industry | 37.1 | 34.7 | 30.9 | 30.9 | 27.4 |
| Service |  |  |  |  |  |
| GDP Real Growth Rate (\%) | 35.9 | 43.7 | 45.1 | 44.9 | 50.2 |
| GDP | 10.9 | 10.4 | 6.6 | 6.7 | - |
| Agriculture | n.a. | n.a | n.a | n.a | n.a |
| Industry | n.a. | n.a | n.a | n.a | n.a |

[^25]|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Service | n.a. | n.a | n.a | n.a | n.a |
| Inflation (\%) | Consumer Price Index | 13.7 | 5.7 | 7.1 | 12.5 |
| Food Price Index | 10.2 | 4.6 | 8.3 | 13.9 | 25.5 |
| GDP Deflator | 27.2 | 17.4 | 9.6 | 21.4 | - |

Source: Asian Development Bank, "Key Indicators for Asia and the Pacific 2008"

Tajikistan's trade loss has been enlarged since 2003. Among the country's main export goods of aluminum, electricity and cotton, aluminum and cotton products are susceptible to the conditions if the global market. While Tajikistan exports electricity generated by hydropower to its neighboring countries, the country imports electricity from Turkmenistan and Uzbekistan. In addition, there is a high dependency on imports for petrol products and food items contributing to the increase in the trade deficit, through more spending on imports due to the recent rapid price increase in these items. Increasing imports of construction materials for infrastructure projects is also one of the factors contributing to the soaring import volume. The trade deficit exceeded 1 billion USD in 2007, up from 84 million USD in 2003. The share of trade loss in GDP also increased to 2 digits after 2005. Import expenditure rose 7 times more than export. These enormous trade losses are partly covered by remittances from migrant workers in Russia and Kazakhstan.

The share of the current-account deficit in GDP has remained less than $1 \%$ except for the year 2004. However, the serious trade deficit has accelerated the current deficit. This was projected to reach $11.2 \%$ in 2007 and 9.3\% in 2008.

An increasing amount of remittance from migrant workers contributed to the currency evaluation during the first quarter of 2008 (4.34 somoni per USD). However, due to the global financial crisis, the Russian and Kazakhstan economies have also been slowing down and many migrant workers to these countries have started to return to Tajikistan. Thus, the amount of remittance also declines. Although there is no direct impact on Tajikistan of the global financial crisis, since remittances from migrant workers account for more than $50 \%$ of the country's GDP, it is considered that the decline in remittances will seriously affect the country's economy.

This deteriorating national current balance has caused a severe foreign exchange decline. The estimated international reserve for 2008 was worth to 169 million USD, which is equal to one month of import expenditure. However, data from the field assessment conducted in March 2009 shows that foreign exchange declines even to an amount relevant to 2 to 3 weeks.

Table 4-21 Balance of Payments and International Reserves (2003-2007)

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance of Payments (million USD) |  |  |  |  |  |
| Trade Balance | -84 | -276 | -421 | -326 | -1,079 |
| Current Balance | -4.8 | -57.0 | -18.8 | -21.4 | - |
| Overall Balance | 27.6 | 3.9 | 5.6 | -10.4 | - |
| \% of GDP |  |  |  |  |  |
| Trade Balance | -7.7 | -6.5 | -14.0 | -15.6 | - |
| Current Balance | -0.3 | -2.7 | -0.8 | -0.8 | - |
| Overall Balance | 1.8 | 0.2 | 0.2 | -0.4 | - |


|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | :---: | ---: | ---: | ---: | ---: |
| International Reserves (million USD) |  |  |  |  |  |
| Total | 117.6 | 172.1 | 188.9 | 203.8 | 48.5 |
| Foreign Exchange | 111.0 | 156.2 | 162.8 | 171.6 | - |
| Exchange Rate (somoni per USD) |  |  |  |  |  |
| Average of Period | 3.1 | 3.0 | 3.1 | 3.3 | 3.1 |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

## 4-3.2 Fiscal Conditions

Tajikistan has maintained a budget surplus since 2002. The surplus for 2007 reached 220 million somoni and there remained a surplus for the year 2008. Nominal GDP growth and improved tax administration contributed to the increase in the country's revenue. Tax income doubled in 2006 from the 712 million somoni of 2003 to 1.567 million somoni. The balance of current transactions also continues to be in surplus with the expenditure level falling below income. However, investment for infrastructure projects under the Public Investment Plan (PIP) remains in deficit and heavily relies on financial assistance from multilateral donors. This expenditure on infrastructure projects takes up $13.8 \%$ of total GDP, with $9.3 \%$ financed externally and $4.5 \%$ funded from the national budget. In addition, preparation for project implementation is progressing faster than in the planned time-frame and disbursement to PIP is expected to exceed the planned budget framework.

Table 4-22 Government Finance of Tajikistan

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Government (million somoni) |  |  |  |  |  |
| Total Revenue and Grants | 824.4 | 1,104.3 | 1,414.5 | 1,823.5 | 3,695.9 |
| Total Revenue | 809.7 | 1,063.6 | 1,383.4 | 1,800.6 | 3,659.5 |
| Current Revenue | 809.7 | 1,063.6 | 1,383.4 | 1,800.6 | 3,659.5 |
| Tax | 712.6 | 933.3 | 1,192.5 | 1,567.4 | - |
| Capital Receipts | 97.1 | 130.4 | 190.9 | 233.1 | - |
| Grants | 14.7 | 40.6 | 31.2 | 22.9 | 36.4 |
| Total Expenditure | 711.5 | 1,088.4 | 1,397.1 | 1,772.3 | 3,467.3 |
| Current Expenditure | 589.7 | 758.3 | 1,052.2 | 1,377.4 | 2,718.7 |
| Capital Expenditure | 181.8 | 330.1 | 344.9 | 394.9 | 748.6 |
| Overall Budgetary Surplus/Deficit | 52.0 | 13.7 | 11.8 | 44.7 | 220.8 |
| Government Finance (million somoni) |  |  |  |  |  |
| Domestic Borrowing | -49.0 | n.a | n.a | n.a | n.a |
| Foreign Borrowing | -20.3 | n.a | n.a | n.a | n.a |
| Use of Cash Balance* | 17.3 | n.a | n.a | n.a | n.a |
| \% of GDP |  |  |  |  |  |
| Total Revenue | 17.0 | 17.2 | 19.2 | 19.3 | 28.6 |
| Total Expenditure | 16.2 | 17.6 | 19.4 | 19.0 | 27.1 |
| Overall Budgetary Surplus/Deficit | 1.1 | 0.2 | 0.2 | 0.5 | 1.7 |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"
Note1: Fiscal year is from $1^{\text {st }}$ January to $31^{\text {st }}$ December
Note2: "Use of Cash Balance" comes from privatization income

Fiscal expenditure by sector shows that economic services account for more than $30 \%$ of the total expenditure. Expenditure on economic services includes loans to the cotton sector through commercial banks, under which collateral based loan has been given, with crops yield as security. However, a lower yield of cotton than expected, together with the global decline in cotton prices has made it difficult to pay back the loans and this has become a serious issue. Expenditure in education, health, social security and welfare, housing and community facilities has been boosted year by year, thanks to an increasing number of projects financed by external donors. As for social security and welfare, since 2000 the sector budgets have also covered expenditure on defense and it is not clearly disclosed how much has been spent on actual social security and welfare activities.

Table 4-23 Public Expenditure of Tajikistan by Sector

| (Unit: million somoni) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| Total expenditure | 772.3 | 1,090.6 | 1,402.7 | 1,778.8 | 3,475.0 |
| General public services* | 131.5 | 160.0 | 204.4 | 225.7 | 470.9 |
| Defense | - | - | - | - | - |
| Education | 112.1 | 164.3 | 253.1 | 317.7 | 524.3 |
| Health | 43.3 | 58.2 | 82.4 | 105.4 | 164.9 |
| Social security and welfare** | 109.0 | 158.3 | 232.4 | 317.0 | 367.9 |
| Housing and community amenities | 43.5 | 73.9 | 80.2 | 101.6 | 234.7 |
| Economic services*** | 100.6 | 167.9 | 508.3 | 218.2 | 1,195.6 |
| Other expenditures | 232.3 | 308.0 | 41.9 | 493.2 | 516.7 |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"
Note 1: * Refers to state administration
Note 2: **From 2000 onward, includes defense
Note 3: ***Refers to expenditure of the national economy

In the PRS (2007-2009), the Government of Tajikistan presents budget allocation by sector, confirmed budget, and unmet need. Total projected expenditure for the 3 years amounts to 5 billion USD. Out of this, only 2.252 billion USD has been confirmed (breakdown: 239 million USD from state budget, 1.172 billion USD from external donors, 841 million USD from FDI). The total unmet need reaches 2.276 billion USD, accounting for $55 \%$ of the total expenditure. Out of this, 537 million USD and 2 billion USD are planned to be found from external donors and FDI respectively.

The largest budget allocation is for energy sector development, followed by the budget for the industry and transportation sectors. Hydropower projects take up the most of the energy sector budget and 850 million USD is expected to be found from FDI, although in fact this is not a realistic amount. Similarly to the energy development budget, the development of industry is budgeted largely from FDI, whose unmet amount reaches 880 million USD. 581 million USD of the transportation sector budget is primarily financed by donor loans, which amount to 340 million USD. Out of this, 204 million USD has not yet been confirmed yet. The social sector heavily depends on donor funding, particularly on grant schemes.

Table 4-24 Finding needs for priority activities in the PRS
(Unit: million USD)

| Sector | Total need | Confirmed financing |  |  | Unmet need |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Budget | External financing |  | Unmet need | Budget | External financing |  |
|  |  |  | PIP (credit/grant) | FDI |  |  | PIP <br> (Credit/grant) | FDI |
| Public administration | 10.0 | 0.0 | $\begin{array}{r} 5.0 \\ (0 / 5.0) \\ \hline \end{array}$ | 0.0 | 5.0 | - | $\begin{array}{r} 5.0 \\ (0 / 5.0) \\ \hline \end{array}$ | 0.0 |
| Macroeconomic policy | 82.9 | 6.3 | $\begin{array}{r} 58.6 \\ (42.9 / 15.7) \end{array}$ | 0.0 | 18.0 | - | $\begin{array}{r} \hline 18.0 \\ (2.1 / 15.9) \end{array}$ | 0.0 |
| Improvement of investment, climate, development of private sector | 33.5 | 0.0 | $\begin{array}{r} 16.1 \\ (0 / 16.1) \end{array}$ | 0.0 | 17.4 | - | $\begin{array}{r} 17.4 \\ (0 / 17.4) \end{array}$ | 0.0 |
| Development of regional cooperation and integration into global economy | 279.4 | 1.7 | $\begin{array}{r} 19.7 \\ (0 / 19.7) \end{array}$ | 200.0 | 58.1 | - | $\begin{array}{r} 8.1 \\ (0 / 8.1) \end{array}$ | 50.0 |
| Development of transportation | 581.6 | 32.3 | $\begin{array}{r} 340.2 \\ (331.4 / 8.8) \\ \hline \end{array}$ | 5.0 | 204.1 | - | $\begin{array}{r} \hline 72.8 \\ (11.0 / 61.8) \\ \hline \end{array}$ | 131.3 |
| Development of communications | 56.1 | 0.0 | 0.0 | 0.0 | 56.1 | - | $\begin{array}{r} \hline 8.1 \\ (4.5 / 3.6) \end{array}$ | 48.0 |
| Development of energy | 1,899.0 | 123.3 | $\begin{array}{r} 365.9 \\ (328.0 / 37.9) \end{array}$ | 0.0 | 911.1 | - | $\begin{array}{r} 61.2 \\ (30.8 / 30.4) \end{array}$ | 850.1 |
| Development of industry | 1,024.9 | 0.0 | 0.0 | 138.0 | 886.9 | - | $\begin{array}{r} 6.9 \\ (0 / 6.9) \\ \hline \end{array}$ | 880.0 |
| Food security and development of agriculture | 225.8 | 21.1 | $\begin{array}{r} \hline 151.7 \\ (120.5 / 31.2) \end{array}$ | 0.0 | 52.9 | - | $\begin{array}{r} \hline 37.4 \\ (6.1 / 31.2) \end{array}$ | 15.5 |
| Development of education | 157.9 | 20.4 | $\begin{array}{r} 61.8 \\ (15.4 / 46.6) \end{array}$ | 0.0 | 75.7 | - | $\begin{array}{r} 45.7 \\ (8.6 / 37.1) \end{array}$ | 30.0 |
| Development of science | 9.3 | 0.2 | $\begin{array}{r} 0.5 \\ (0 / 0.5) \\ \hline \end{array}$ | 0.0 | 8.6 | - | $\begin{array}{r} 8.6 \\ (0 / 8.6) \\ \hline \end{array}$ | 0.0 |
| Development of health care system | 160.8 | 26.2 | $\begin{array}{r} 82.2 \\ (23.7 / 58.4) \end{array}$ | 0.0 | 52.4 | - | $\begin{array}{r} 52.4 \\ (10.2 / 42.2) \end{array}$ | 0.0 |
| Social welfare | 46.2 | 0.5 | $\begin{array}{r} 11.6 \\ (0 / 11.6) \\ \hline \end{array}$ | 0.0 | 34.1* | - | $\begin{array}{r} 34.1 \\ (0 / 34.1) \\ \hline \end{array}$ | 0.0 |
| Expanded access to water supply, sanitation and housing and municipal services | 180.2 | 5.4 | $\begin{array}{r} 35.6 \\ (20.9 / 14.7) \end{array}$ | 0.0 | 139.9 | - | $\begin{array}{r} \hline 136.3 \\ (26.9 / 109.4) \end{array}$ | 3.0 |
| Promotion of environmental sustainability | 47.8 | 1.8 | $\begin{array}{r} 22.5 \\ (6.2 / 16.3) \end{array}$ | 0.0 | 23.5 | - | $\begin{array}{r} 23.5 \\ (0 / 23.5) \end{array}$ | 0.0 |
| Gender equality | 3.2 | 0.0 | $\begin{array}{r} 1.6 \\ (0 / 1.6) \\ \hline \end{array}$ | 0.0 | 1.7 | - | $\begin{array}{r} 1.7 \\ (0 / 1.7) \end{array}$ | 0.0 |
| Total expenditures under the PRS | 5,029.4 | 239.3 | $\begin{array}{r} 1,172.9 \\ (888.9 / 284.0) \end{array}$ | 841.5 | 2,775.7 | 230.7** | $\begin{array}{r} 537.2 \\ (100.3 / 436.9) \end{array}$ | 2,007.9 |

Source: The Government of Tajikistan, "Poverty Reduction Strategy of the Republic of Tajikistan for 2007-2009", (2007), Table 7 on p.65-67
Note1: Although, in the ADB's original document, the unmet need is reported as 38.5 million USD, in this table, the figure was corrected to 34.1 million USD, based on the necessary amount of 46.2 million USD and the confirmed amount of 12.1 million USD.
Note2: State budget for the unmet need is allocated to each fiscal year. The total budget for the unmet need is shown in the projected total of the CSIP for 2007-2009

## 4-3.3 Debt Sustainability

Although total outstanding debt remains at around 1.1 billion USD, the proportion of external debt against GNI is shrinking, thanks to on-going principal repayment on the long-term debt, as well as the expanding economy. External debt as a percentage of GNI decreased from 78.8\% in 2003 to $42.5 \%$ in 2006 . The proportion of the debt service ratio of export expenditure also fell from $7.2 \%$ in 2003 to $5.1 \%$ in 2006.

The government of Tajikistan formulated the Program of Public External Borrowing of the Republic of Tajikistan for 2009-2011, with assistance from IMF and WB, and uses the program for its debt management. According to the Ministry of Finance in Tajikistan, external debt against GDP improved to $26.7 \%$ as of January 2009, from $30.2 \%$ in 2008 and $110 \%$ in 2000. Under the program, the level of external debt to GDP is designed to be maintained at less than 40\%.

Table 4-25 External Indebtedness of Tajikistan

|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| External debt (million USD) |  |  |  |  |  |
| Total debt outstanding and disbursed | 1,151.7 | 992.6 | 1,033.7 | 1,153.6 | - |
| Long-term | 970.8 | 787.0 | 822.7 | 1,014.9 | - |
| Public and publically guaranteed | 911.8 | 758.3 | 796.8 | 982.4 | - |
| Private non-guaranteed | 59.0 | 28.7 | 26.0 | 32.5 | - |
| Short-term | 81.1 | 83.4 | 83.8 | 94.5 | - |
| Use of IMF credit | 99.8 | 122.2 | 127.1 | 44.2 | - |
| Debt service (million USD) |  |  |  |  |  |
| Principal repayment on long-term debt | 50.8 | 62.4 | 51.7 | 85.7 | 58.0 |
| Interest on long-term debt | 14.7 | 21.7 | 10.6 | 46.6 | 20.7 |
| Interest on short-term debt | 0.8 | 2.4 | 3.3 | 4.4 | - |
| Debt indicators (\%) |  |  |  |  |  |
| External debt as percent of GNI | 78.7 | 49.6 | 46.2 | 42.5 | - |
| Total long-term debt as percent of total debt | 84.1 | 86.3 | 79.4 | - | - |
| Debt service as percent of export of goods and services | 7.2 | 6.7 | 4.6 | 5.1 | - |

Source: ADB, "Key Indicators for Asia and the Pacific 2008"

In Tajikistan, main donors for the external debt are international financial institutes such as WB and ADB. Loans from such institutions have been enlarged by approximately 6 times in the past 10 years, accounting for $50 \%$ of total external debt, as of the end of 2008 . Before the independence, most of the country's external debt to from Russia. Thanks to Debt Equity Swap, however, the amount of the external debt burden to Russia was enormously reduced. IMF document reports that during the past 2 years, China has accelerated in disbursing loans to Tajikistan and that almost all of 277 million USD, which accounts for additional loans financed during 2008, is from China ${ }^{25}$. In addition, the government of Tajikistan and the Export-Import Bank of China signed a memorandum on a 100 million USD loan for road and energy projects ${ }^{26}$.

[^26]In 2008, the government of Pakistan formally requested that the Ministry of Finance of Tajikistan repay the debt service of 13 million USD, which had been restructured in 2003. In 2004, Tajikistan announced that the governments of Tajikistan and Pakistan verbally agreed that the debt was converted to grant with a subsequent write-off of accumulated interest liabilities. The Ministry of Finance of Tajikistan had then removed the liabilities from the debt register and discontinued its service. However, according to the initial restructuring agreement, the Tajikistan government had allocated a budget for debt service to Pakistan.

## - Debt Sustainability Analysis (DSA)

In March 2009, upon the consultation with ADB, a report on joint IMF-WB debt sustainability analysis was released.

## Assumptions of Major Macroeconomic Indicators (2009-2028)

- $\quad$ Real GDP growth rate: 5-7\% annually (ref. historical average on 1998-2008 is $8 \%$ )
- GDP deflator (2011~2028): 4.5\% annually
- Export growth: average 9\% per year
- Foreign Currency Reserve: By 2008, improve to the level of 5-months equivalent import amount

Budget deficit as percent of GDP: 0.5\% (2009~2028)

In the DSA, under the baseline scenario, it is projected that the ratio of debt against export revenue will exceed the threshold level. The ratio reaches $141 \%$ in 2009 , which is a long way beyond $100 \%$. The ratio is expected to soar until 2014, then to gradually fall, but to remain above the threshold. On the other hand, the external debt service ratio is predicted to stay beyond the threshold. Assuming the case that all public debt and publically guaranteed debt are concessional, debt service payments are projected to be manageable despite of increasing by principal payments on loans from China fall due.

The public domestic debt is limited for $3 \%$ of the total public sector debt in Tajikistan. However, there is a possibility to deteriorate debt sustainability due to the expected possible capitalization needs of the National Bank of Tajikistan and the fiscal costs for resolving the cotton debt problem, which is estimated at approximately 500 million US dollars.

In conclusion, the risk of the debt burden remains high, as reported in the DSA document in 2007. The DSA signals that if there is no growth through investment, the macro economy may deteriorate and debt sustainability be negatively affected by non-concessional loans and additional debt. Therefore, it is worth mentioning that new loans and mega investment projects have to be meticulously analyzed with due diligence and that external funding should be utilized productively.

The joint DSA by IMF and WB examined impacts of additional bilateral borrowing in the case of an additional $1 \%$ of GDP of bilateral borrowing per annum to finance higher capital spending. The additional loan amount is estimated to be approximately 70 million US dollars for the next 10 years. The additional bilateral loans bring about deterioration of all debt indicators compared to the baseline scenario. Therefore, if JICA considers provision of ODA loan to Tajikistan, it is inevitable to assess the macroeconomic and public debt management of the country as well as other donors' lending operations, including China.


Source: IMF, "Debt Sustainability Analysis Under the Debt Sustainability Framework for Low-Income Countries (Tajikistan)", (March 31, 2009)

Figure 4-11 Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios 2008-2028


Source: IMF, "Debt Sustainability Analysis Under the Debt Sustainability Framework for Low-Income Countries (Tajikistan)", (March 31, 2009)

Figure 4-12 Indicators of Public Debt under Alternative Scenarios 2008-2028

## 4-4 Major Donors’ Activities in Tajikistan

In Tajikistan, a Donor Coordination Council was established to aim for proper coordination among donors. Currently Switzerland chairs the council. In addition, under the facilitation of Johannes Linn of Brookings Institute, the former Vice President of World Bank, 12 organizations are jointly formulating a Joint Country Support Strategy (JCSS). These 12 organizations are ADB, WB, UN, EU, EBRD, the Department of International Development (DfID), Germany, SIDA of Sweden, Switzerland, the United States Agency for International Development (USAID), the Aga Khan Foundation, and the Organization for Security and Co-operation in Europe (OSCE). The strategy was launched in June 2007 and is expected to be approved in the middle of 2009.

Table 4-26 Official Development Assistance by Donor (Disbursement)

| Time <br> period |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Donor | 2003 | 2004 | 2005 | (Unit: million USD) |  |  |
| United States | 47.1 | 47.5 | 56.43 | 43.61 | 34.89 |  |
| IDA | 13.43 | 54.97 | 36.69 | 34.61 | 27.58 |  |
| EC | 25.29 | 21.76 | 35.96 | 33.45 | 15.95 |  |
| ADB | 14.24 | 19 | 25.22 | 34.05 | 36.8 |  |
| Switzerland | 13.41 | 17.04 | 9.95 | 11.91 | 11.18 |  |
| IMF (SAF/ESAF/PRGF) | -0.18 | 17.08 | 15.08 | 14.42 | $\ldots$ |  |
| Germany | 4.67 | 5.42 | 8.33 | 8.7 | 12.56 |  |
| Japan | 4.77 | 6.58 | 9.93 | 8.04 | 9.43 |  |
| Sweden | 1.78 | 3.12 | 4.56 | 8.86 | 13.85 |  |
| Turkey | 0.55 | 6.48 | 5.09 | 5.94 | 6.9 |  |
| EBRD | 1.34 | 1.53 | 1.42 | 0.08 | 0.29 |  |

Source: OECF/DAC, "International Development Statistics" and ADB Annual Report 2007

As shown in Table 6-26, in the past 5 years, USAID has provided the largest amount of assistance to Tajikistan, followed by WB (IDA), EC, ADB, and Switzerland. It is worth noting that recently non-OECF/DAC members such as China, Russia and Iran have become very active in supporting mega loan projects in Tajikistan ${ }^{27}$.

The government of Tajikistan provided false information regarding the financial situation of the government and the national bank to IMF on 6 occasions, when wishing to attract IMF loans. The latest false report was revealed in 2007. Responding to this, in March 2008, the IMF executive board requested that Tajikistan refund 47 million USD of the Poverty Reduction Growth Facility (PRGF). IMF's decision affected other agencies. WB and ADB also suspended their assistance for a while. After the repayment of the PRGF loan was completed in February 2009, the national bank received a special accounting check from the British auditing firm, Ernst \& Young. In addition, the bank was closely monitored by IMF staff for a period of 6 months. At a board meeting on 21 April 2009, the IMF executive board approved 116 million USD of PRGF, taking into account the current economic situation of Tajikistan.

[^27]
## 4-4.1 World Bank/ International Development Association (IDA)

Upon an agreement with Government of Tajikistan, WB identified 3 goals in a Country Partnership Strategy 2006-2009:

1 To improve business opportunities in rural and urban areas
2 To enhance and preserve the quality of human capital
3 To exploit the country's hydropower potential

In order to enhance business opportunities, IFC, as a focal point, supports the strengthening of the financial sector and the reduction of opportunity costs of business development. IDA is leading in the support for land reform, in particular, the reduction of overloaded farm rents in the cotton sector.

As for human development, WB actively supports such sectors as 1) education, 2) health, and 3) social security. In the education sector, WB offers support through trust funds financed by Russia. In Tajikistan, donor coordination in the education sector is fairly organized. Since the education sector shows weakness in management, the bank provides supports at the governance level, in addition to technical assistance (such as the improvement of teaching methods). In the health sector, WB focuses on primary health care. As for social security, WB supports social safety-net projects jointly with EC. In Tajikistan the poverty rate has been rising dramatically. Although the government has an interest-free loan scheme, targets for the scheme have not been properly set and currently it is under review. Due to the prevailing poverty, the number of girls who cannot attend school is increasing ${ }^{28}$. It is a concern that the lack of girls’ education opportunities might cause higher illiteracy among mothers in next generation and that the large numbers of illiterate mothers may then impact on society in future.

In Tajikistan, WB leads energy sector development and currently provides assistance jointly with ADB , under which WB lends support to reduce commercial losses in electricity by improving meter systems and billing systems ${ }^{29}$. The bank is also helping Tajikistan to draw up F/S and an Environment Impact Assessment (EIA) ${ }^{30}$ for the country's largest hydropower station in Rogun ${ }^{31}$. As the F/S is prepared by the government, it will take somoni time. However, it is expected to be completed early next year. Although the financial status of the project is reasonably good, actual financial allocation will depend on how much consumer countries contribute to the project. These consumer countries are Afghanistan, Pakistan, and Kyrgyzstan, counties in which ADB is planning to build transmission lines. In addition to this, there needs to be consideration of somoni concerns ahead, such as challenges in governance, transparency and national revenue.

Before 2002, all assistance from WB was provided in the form of loans. However, from 2002 onward, WB offered either a mix of loan and grant, or grant only assistance.

[^28]Table 4-27 WB Projects in Tajikistan
(Unit: million USD)

| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Institution Building Technical Assistance | IDA Loan | 16-May-96 Completed | 5 |
| Agriculture Recovery \& Social Protection Project | IDA Loan | $\begin{aligned} & \text { 12-Sep-96 } \\ & \text { Completed } \\ & \hline \end{aligned}$ | 50 |
| Pilot Poverty Alleviation Project | IDA Loan | 10-Apr-97 Completed | 12 |
| Post-Conflict Rehabilitation Project | IDA Loan | 16-Dec-97 Completed | 9.98 |
| Post Conflict Reconstruction Project | IDA Loan | 29-Jan-98 <br> Completed | 9.98 |
| Structural Adjustment Credit (SAC) | IDA Loan | 30-Jul-98 <br> Completed | 50 |
| Emergency Flood Assistance Project | IDA Loan | 27-Aug-98 Completed | 5 |
| Education Reform Project | IDA Loan | 13-May-99 Completed | 5 |
| SAC (SUPPLEMENT) | IDA Loan | 27-May-99 <br> Completed | 6.7 |
| Farm Privatization Support Project | IDA Loan | 10-Jun-99 Completed | 20 |
| Institution Building Technical Assistance 2 Project (IBTA 2) | IDA Loan | 17-Jun-99 Completed | 6.7 |
| Emergency Flood Assistance Project Supplemental Credit | IDA Loan | 14-Dec-99 Completed | 2 |
| Primary Health Care Project | $\begin{aligned} & \text { IDA Loan } \\ & \text { (+SDC 0.3) } \end{aligned}$ | 7-Mar-00 <br> Completed | 5.4 |
| Lake Sarez Risk Mitigation Project | $\begin{gathered} \text { IDA Loan } \\ (+ \text { Swiss } 2.9+\text { US } 0.25+ \\ \text { AKDN 0.5) } \end{gathered}$ | 22-Jun-00 <br> Completed | 0.47 |
| Rural Infrastructure Rehabilitation Project | IDA Loan | 22-Jun-00 <br> Completed | 20 |
| FARM PRIVATIZATION SUPPORT SUPPLEMENTAL PROJECT | IDA Loan | 22-Feb-01 <br> Completed | 3.1 |
| Structural Adjustment Credit 2 (SAC 2) | IDA Loan | 26-Jun-01 <br> Completed | 50 |
| Strengthening National Statistics TFSCB Grant | Grant (Trust Fund For Statistical Capacity Building) | 6-May-02 Completed | 0.34 |
| Poverty Alleviation 2 Project | IDA Loan | 21-May-02 Completed | 13.8 |
| Dushanbe Water Supply Project | IDA Loan | $\begin{aligned} & \hline \text { 18-Jun-02 } \\ & \text { On-going } \\ & \hline \end{aligned}$ | 17 |
| Pamir Private Power Project | IDA Loan (+IFC 8+Foreign Commercial Bank 8.2) | 27-Jun-02 <br> On-going | 10 |
| Education Modernization Project | IDA Loan (13) <br> Ida Grant For Debt Vulnerable (7) | $\begin{aligned} & \text { 15-May-03 } \\ & \text { On-going } \end{aligned}$ | 20 |


| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Community Agriculture \& Watershed Management GEF Project | Grant (Global Environment Facility) | 15-Jun-04 On-going | 4.5 |
| Community Agriculture \& Watershed Management Project | IDA Loan (5) Ida Grant For Debt Vulnerable (5.8) (+United Nations 1.46) | $\begin{aligned} & \text { 15-Jun-04 } \\ & \text { On-going } \end{aligned}$ | 10.8 |
| Dashtidzhum Biodiversity Conservation (MSP) | Grant (Global Environment Facility) | 2-Aug-04 Completed | 1 |
| Social Protection Reform Technical Assistance Grant | $\begin{aligned} & \hline \text { Grant } \\ & \text { (JSDF) } \end{aligned}$ | 22-Feb-05 Completed | 0.58 |
| Land Registration \& Cadastre System for Sustainable Agriculture Project (LRCSP) | IDA Grant For Debt Vulnerable | 21-Apr-05 On-going | 10 |
| Ferghana Valley Water Resources Management Project | IDA Grant | 26-Jul-05 <br> On-going | 13 |
| Energy Loss Reduction Project | IDA Loan (15) Ida Grant For Debt Vulnerable (3) (+SDC 8) | 30-Jun-05 <br> On-going | 18 |
| Education for All, Fast Track Initiative Catalytic Fund for Tajikistan | Grant (Free-Standing Single Purpose Trust Fund) | 30-Nov-05 <br> On-going | 9.2 |
| Community \& Basic Health Project | IDA Grant (+SIDA 6) | 15-Dec-05 On-going | 10 |
| Municipal Infrastructure Development Project | IDA Grant | $\begin{aligned} & \text { 19-Jan-06 } \\ & \text { On-going } \end{aligned}$ | 15 |
| Strengthening the National Statistical System | Grant (Trust Fund For Statistical Capacity Building) | $\begin{aligned} & \text { 31-May-06 } \\ & \text { On-going } \end{aligned}$ | 1 |
| Avian Influenza and Human Pandemic Preparedness and Response Project | IDA Grant <br> (+UNICEF0.2+WHO0.1) | $\begin{aligned} & \text { 29-Jun-06 } \\ & \text { On-going } \end{aligned}$ | 5 |
| Programmatic Development Policy Grant | IDA Grant | 6-Jul-06 <br> Completed | 10 |
| Public Sector Reform TA | Ida Grant For Debt Vulnerable | 6-Jul-06 On-going | 5 |
| Additional Financing for the Dushanbe Water Supply Project | IDA Grant | $\begin{gathered} \hline \text { 19-Dec-06 } \\ \text { On-going } \\ \hline \end{gathered}$ | 5 |
| Cotton Sector Recovery Project | IDA Loan | $\begin{gathered} \hline \text { 30-May-07 } \\ \text { On-going } \\ \hline \end{gathered}$ | 15 |
| Programmatic Development Policy Grant 2 | IDA Grant | 19-Jul-07 <br> Completed | 10 |
| Tajikistan Youth Social and Economic Opportunity Grant | Grant (Development Grant Facility) | $\begin{aligned} & \text { 11-Sep-07 } \\ & \text { On-going } \end{aligned}$ | 2.1 |
| Energy Emergency | IDA Grant | $\begin{aligned} & \text { 1-May-08 } \\ & \text { On-going } \end{aligned}$ | 6.5 |
| Community \& Basic Health Additional Financing | Grant (Special Financing) | $\begin{aligned} & \text { 13-Jun-08 } \\ & \text { On-going } \end{aligned}$ | 4 |
| EMERGENCY FOOD SECURITY AND SEED IMPORTS PROJECT | Grant (Special Financing) | 13-Jun-08 On-going | 5 |
| Pamir Additional Financing | IDA Grant (+Foreign Commercial Bank 4.4) | 31-Jul-08 <br> On-going | 2.5 |


| Project | Scheme | Approval Date/ <br> Status | Amount |
| :--- | :---: | :---: | :---: |
| Tajikistan Programmatic Development <br> Policy Grant 3 | IDA Grant | $26-$ Mar-09 <br> On-going | 20 |
| Public Financial Management <br> Modernization Project | - | N/A <br> Pipeline | 5 |
| Fast Track Initiative Catalytic Fund Grant - <br> 3 | Grant | N/A <br> Pipeline | 13 |
| Community and Basic Health Project - <br> Additional Financing | - | N/A <br> Pipeline | 5 |
| Banking and Private Sector Support | - | N/A <br> Dropped | 10 |
| National Quality Education Project | - | N/A <br> Pipeline | 10 |
| Health Sector Strategy Support Project | - | N/A <br> Pipeline | 10 |
| Third Poverty Alleviation Project | - | N/A <br> Dropped | 1.97 |

Source: WB website (http://www.worldbank.org/ as of June 2009)

## 4-4.2 Asian Development Bank (ADB)

ADB began its assistance to Tajikistan in 1998 and this year marks the 10 year anniversary of the bank's cooperation with Tajikistan. All of the bank's assistance has been provided through the Asian Development Fund (ADF). For the future, the bank plans to allocate 50 million USD for Tajikistan assistance, which implies 1 or 2 projects per year. Initially the bank offered both loans and grants. However, due to somoni concerns in debt sustainability, only grant assistance will be provided from 2009 to 2012.

ADB's operation in Tajikistan is guided by the Long-Term Strategic Framework (2008-2020) and CAREC. Currently ADB and 11 other development agencies (ADB, WB, UN, EU, EBRD, DfID, Germany, Sweden SIDA, Switzerland, USAID, Aga Khan, and OSCE) are preparing a Joint Country Support Strategy for 2009 to 2012, which is expected to be approved by the Board in the middle of 2009.

Priority areas for ADB are 1) agriculture and natural resources, 2) transportation and communication, 3) energy, 4) judicial and economy management and policy, and 5) education, health, and social security. The main priorities are infrastructure and regional cooperation for the transportation and energy sectors through CAREC. In the immediate future, the bank will focus on projects for the Nurek reservoir construction ${ }^{32}$ and transmission line maintenance ${ }^{33}$. Currently the bank plans a project to streamline cotton processing plants through $\mathrm{PPP}^{34}$. In addition, ADB is considering another financial assistance of 40 million USD.

[^29]Table 4-28 ADB Projects in Tajikistan
(Unit: million USD)

| Project | Scheme | Approval Date/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Post conflict Infrastructure Rehabilitation Program | Loan | 10-Dec-98/ completed | 20 |
| Social Sector Rehabilitation Project | Loan | 26-Oct-99/ completed | 20 |
| Emergency Flood Rehabilitation Project | Loan | 2-Dec-99/ completed | 5 |
| Power Rehabilitation Project | Loan | 20-Dec-00/ completed | 34 |
| Road Rehabilitation Project | Loan | 20-Dec-00/ completed | 20 |
| Emergency Restoration of Yavan Water Conveyance System Project | Loan | $\begin{aligned} & 30-O c t-01 / \\ & \text { completed } \\ & \hline \end{aligned}$ | 3.6 |
| Emergency Baipaza Landslide Stabilization Project | Loan | $\begin{aligned} & \hline \text { 10-Sep-02/ } \\ & \text { completed } \end{aligned}$ | 5.3 |
| Regional Trade Facilitation and Customs Modernization Program | Loan | 29-Oct-02/ completed | 10 |
| Agriculture Rehabilitation Project | Loan | $\begin{aligned} & \text { 18-Dec-02/ } \\ & \text { on-going } \end{aligned}$ | 35 |
| Microfinance Systems Development Program | (Policy loan) | 26-Jun-03/ completed | 4 |
| Microfinance Systems Development Program | (Investment loan) | 26-Jun-03/ completed | 4 |
| Dushanbe-Kyrgyz Border Road Rehabilitation Project I | Loan | 18-Dec-03/ completed | 15 |
| Education Sector Reform Project | Loan | 15-Apr-04/ on-going | 7.5 |
| Health Sector Reform Project | Loan | $\begin{aligned} & \text { 15-Apr-04/ } \\ & \text { on-going } \end{aligned}$ | 7.5 |
| Regional Trade Facilitation and Customs Cooperation Project | Loan | 26-Nov-04/ completed | 10.7 |
| Irrigation Rehabilitation Project | Loan | $\begin{gathered} \text { 10-Dec-04/ } \\ \text { on-going } \end{gathered}$ | 22.7 |
| Dushanbe-Kyrgyz Border Road Rehabilitation Project II | (Loan/ grant) | 17-Nov-05/ completed | $\begin{array}{r} 30 \\ (29.5 / 0.5) \end{array}$ |
| Sustainable Cotton Subsector Project | Loan / grant | 3-Nov-06 on-going | $\begin{array}{r} 12 \\ (5.5 / 6.5) \\ \hline \end{array}$ |
| Rural Development Project | Loan / grant | $\begin{gathered} \hline \text { 29-Jan-07 } \\ \text { on-going } \\ \hline \end{gathered}$ | $\begin{array}{r} 17.1 \\ (8.8 / 8.3) \\ \hline \end{array}$ |
| Khatlon Province Flood Risk Management Project | Loan | 5-Oct-07/ on-going | 22 |
| CAREC Transport Corridor III (Dushanbe Uzbekistan Border Road) Project | (Loan/grant) | $\begin{gathered} \text { 24-Oct-07 } \\ \text { on-going } \end{gathered}$ | $\begin{array}{r} 53.4 \\ (40.9 / 12.5) \end{array}$ |
| Nurek 500 kV Switchyard Reconstruction Project | Grant | 17-Nov-08 <br> on-going | 54.77 |

Source: ADB website (http://www.adb.org/Projects/ as of June 2009)

## 4-4.3 European Bank for Reconstruction and Development (EBRD)

On 26 January 2009, the EBRD Board of Directors approved a new assistance strategy for the next 3 years. EBRD identifies the following strategic priorities: 1) Fostering of the private sector, 2) Strengthening of the financial sector, 3) Support for infrastructure development, and 4) Enhancing of policy dialogue. This is similar to the strategy for Kyrgyz. For fostering of the private sector, the bank focuses on micro and small business development through microfinance as well as on primary agricultural sector reform. Since the fall 2008, the low level of the capital adequacy ratio has become a serious problem. This was caused by loans to the agricultural sector (particularly for cotton). Due to a decline in cotton price and decrease in yield, $60 \%$ of loan repayment have not yet been settled. The bank also provides technical assistance to the agricultural sector. As for financial sector assistance, the Bank's second priority is to strengthen the financial sector by increasing sector capitalization and further enhance its capacity for reputable financial intermediation. Currently EBRD supports five banks in Tajikistan, including the Agro Investment Bank, the First Micro Finance Bank, and Eshkata Bank ${ }^{35}$. The majority of bank transactions originate in Kazakhstan and Russia. The bank also provides mid-term loans.

With regard to infrastructure, the bank prioritizes the commercialization of infrastructure and the maintenance of basic infrastructures. As for policy dialogue, the bank is strengthening its policy dialogue with the authorities in order to improve the investment climate and to support sector reform efforts.

EBRD mainly utilizes the financial tools developed under the Early Transition Countries Initiative (ETC). Through ETC, the bank supports 10 to 12 new projects of a 50 million Euro-scale every year. It offers short-term assistance to the banking sectors of private companies and long-term support to municipalities. The bank expands investment opportunities, particularly to trade services and banking sectors. IFC also actively provides support to these areas.

EBRD are currently supporting such projects as 1) municipality projects, 2) infrastructure projects, 3) water canal projects, and 4) Dushanbe projects (water canal and trolley bus projects). The water canal sector faces many challenges, including a limited capacity of implementing partners, state-lead management, corruption, and problems in the tariff and billing systems. The bank provides grants with due diligence, loans (Libor $+1 \%$ ), and technical support to tackle these issues. Since these issues need to be dealt with step by step, at the moment, the tariff issue is not considered a technical support matter. The implementation of this project, located in Khujand, is going relatively well. Assistance to Dushanbe Airport (co-financed by France) has resumed. The project was suspended for a while, due to somonie problems in the audit report. Support to Mining industry (appraisal and official drillings), which has big potential, is currently being considered as the next possible project area. The bank is also presently reviewing a new project for agribusiness, which is the most important sector after aluminum production.

[^30]Table4-29 Activities of EBRD in Tajikistan

| Project | public/private | Approval/ Status | Amount |
| :---: | :---: | :---: | :---: |
| Tajikistan Financial Institutions Initiatives | Private | 3 December 1996 Completed | maximum of 8.6 |
| Khujand Packaging | Private | 22 July 1997 Completed | Loan: 1.7 <br> *Optional |
| Obi-Zulol Water Bottling Plant | Private | 30 June 1998 Completed | Ordinary equity: 1.7 preferred redeemable shares:3.5 |
| Khoujand Airport | Public | 9 March 1999 Completed | 3 |
| TSOB Equity Investment | Private | 7 September 1999 Completed | Up to 0.5 |
| TSA Air Navigation Systems | Public | 4 September 2001 Signed | 5.5 |
| Tajikistan Telecommunications Project | Public | 4 September 2001 Signed | 13 |
| Tajikistan Micro \& Small Enterprise Finance Facility (TMSEFF) | Private | 29 July 2003 <br> Board approved, <br> Pending signing | 7 |
| Khujund Water Supply Improvement Project | Public | 8 June 2004 <br> Signed | Up to 1.2 |
| TSA Air Fleet Upgrade Project | Private | 30 November 2004 Completed | 6.7 |
| Eskhata Bank Tajikistan - Equity Investment | Private | 15 November 2005 Signed | 2.5 |
| Tajik Agricultural Finance Facility | Private | 9 October 2007 <br> Board approved | Up to 10 |
| Road Maintenance Development Project | Public | $\begin{gathered} 23 \text { October } 2007 \\ \text { Signed } \\ \hline \end{gathered}$ | 4 |
| Tajik Financial Sector Framework | Private | 12 May 2008 Board approved | B-loan: 10 |
| Khujund Water Supply Improvement Project II | Public | $\begin{aligned} & 12 \text { May } 2008 \\ & \text { Signed } \end{aligned}$ | Up to 2.0 |
| Dushanbe Solid Waste Management Project | Public | $\begin{aligned} & 22 \text { July } 2008 \\ & \text { Signed } \end{aligned}$ | 11.71 |
| Agroinvestbank Equity Investment | Private | 25 March 2009 Board approved, Pending signing | up to $25 \%+1$ share of the shares in Agroinvestbank |
| Southern Tajikistan Water Rehabilitation Project | Public | 6 May 2009 Passed final review, Pending board approval | 2.0 |
| Dushanbe Public Transport | public | 30 June 2009 (planned) | 5.0 |

Source: EBRD website (http://www.ebrd.com/projects/psd/country/tajik.htm as of June 2009)

## 4-4.4 United States Agency for International Development (USAID)

USAID has been providing more than 300 million USD worth of assistance to Tajikistan since 1993. The first 3 to 5 years focused on humanitarian assistance due to the civil war in Tajikistan. However, currently USAID delivers supports under 4 core pillars: 1) economic growth, 2) investment in people, 3) fair and democratic government, and 4) "For Food for Peace".

USAID does not offer any financial assistance or grants which directly finance the Tajikistan government, since the agency judges that the government of Tajikistan has a lack of transparency. Currently, USAID Tajikistan Office gives top priority to the health sector. But USAID is also in the planning stage of a community education project with a 10-15 million USD budget for stabilization. Although initially the target for the project was women, in consideration of the severe economic situation, the project also covers migrant workers. The "For Food for Peace" program is currently under implementation at grass root level.

Table 4-30 Activities of USAID in Tajikistan (2009)

| Priority Issues | Projects |
| :--- | :--- |
| Economic Growth | - Improvement of business opportunities |
|  | - Support to small and medium enterprises |
|  | - Commercial law reform |
|  | - Microfinance |
|  | - Facilitation of Tajikistan's accession to WTO |
|  | - Capacity building of financial policy and macroeconomics |
|  | - Support for land tenure legislation |
|  | - Electricity sector reform etc |
| Investing in People | - Support to health system reform |
|  | - Promotion of TB treatment and prevention |
|  | - Assistance in HIV/AIDS prevention |
|  | - Support for fight against avian influenza |
|  | - Assistance in implementation of national education strategy |
|  | - School finance and management reform |
|  | - Development of school curriculum etc |
| Governing Justly and | - Local governance reform |
| Democratically | - Capacity building of civil society |
|  | - Provision of television contents |
|  | - Legal framework reform etc |
| For Food for Peace | - Improvement of maternal and child health |
|  | - Rehabilitation/construction of water and sanitation facilities |
|  | - School meals etc |

Source: USAID Tajikistan Office website (http://centralasia.usaid.gov/ as of June 2009)

## 4-4.5 Switzerland

Switzerland has provided assistance to the government of Tajikistan since 1993: initially in the form of humanitarian assistance until 1997, which then shifted to technical support and financial aid. The Agency for Development and Cooperation (SDC) and the Swiss State Secretariat for Economic Affairs (SECO) are the coordinating bodies for this assistance. Switzerland takes a relatively active role in assistance to Central Asia. This is because Tajikistan is identified as one of the priority countries for development cooperation, together with Kyrgyzstan, Uzbekistan
and Turkmenistan. These countries are members of the Swiss Constituency Group in EBRD, IMF and $\mathrm{WB}^{36}$.

Switzerland formulated a Regional Cooperation Strategy 2007-2011 and identifies three objectives and five domains of intervention. The three objectives are 1) transparent, accountable and effective public institutions; 2) equitable access to good quality public services; and 3) sustainable and private sector-led growth. Switzerland plans to support Tajikistan to achieve these goals with the five pillars of intervention mentioned below. Details of the interventions are described in Table 6-31.
a. Health care reform
b. Basic infrastructure
c. Disaster risk and water management
d. Private sector development
e. Public institutions and services

Table 4-31 Activities of SDC

| Priority Issues | Projects |
| :--- | :--- |
| Health Care Reform | - Strengthening Health Research |
|  | - Support to State Medical University |
|  | - Health Care Reform and Family Medicine Support (SINO) |
|  | - Community and Basic Health Project (CBHP) |
|  | - Health Policy Dialogue in Tajikistan |
| Basic Infrastructure | - Dissemination of Integrated Water Resource Management |
|  | - Khujand Water Supply |
|  | - Energy Loss Reduction Program |
|  | - Power Rehabilitation Program |
| Disaster Risk and Water | - Capacity Building to CoES |
| Management | - Rehabilitation of the Seismic Monitoring Network |
|  | - Centre of Competence for Disaster Reduction (CCDR) |
|  | - Awareness Building on Integrated Local Risk Management |
|  | - Risk Management in Muminabad |
|  | - Tajik Earthquake Safety Initiative |
|  | - Emergency Response and Recovery in Rasht district (TJ) |
|  | - National Mine Risk Education in TJ |
|  | - Disaster Reduction Small Grant Line |
| Private Sector | - Trade Promotion |
|  | - Micro and Small Enterprises |
|  | - Farmer Ownership Model |
|  | - SME Policy Project |
|  | - Support to WTO |
|  |  |

[^31]| Priority Issues | Projects |
| :--- | :--- |
| Public Institutions and | - Art and Culture |
| Services | - Local Development Muminabad |
|  | - Pamir High Mountain Project |
|  | - Local Development Self Governance |
|  | - Judiciary |
|  | - Reduction of Violence against Women |
|  | - Swiss Cooperation Fund |

## Source: Swiss Agency for Development and Cooperation website

 (http://www.swisscoop.tj/en/Home/Activities_in_Tajikistan as of June 2009)
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#### Abstract

\section*{Annex}

1: Politics, Society and International Relations in Central Asia 2: Regional Cooperation Organizations in Central Asia


## 1 Politics, Society and International Relations in Central Asia

Central Asia comprises the five countries of Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyz Republic and Tajikistan. The total population of the region is approximately 59 million, roughly equivalent to half the population of Japan, and the combined GDP of the region is approximately US $\$ 120$ billion, equivalent to just under 3\% of Japan's GDP. Central Asia is vast, covering an area of roughly 4 million square kilometers. Geographically speaking, it is situated in the heart of the Eurasian Continent and is surrounded by Russia, China, Afghanistan, South Asia and West Asia, and its geopolitical location means that it both receives and exerts influence in relations with surrounding countries. These geopolitical features of Central Asia create a situation whereby instability in the region can trigger interference from surrounding countries, which in turn is liable to further destabilize Central Asia.

## 1-1 Political Transitions and Current Conditions

## 1-1.1 The Central Asia’s Changes

The national borders, country names and languages (ethnic tongues), etc. of the five Central Asian countries originated out of policies enforced during the Soviet era. Central Asia fell under the rule of the Russian Empire during the $19^{\text {th }}$ century and, following the Russian Revolution, in the period from the demarcation of ethnic republics in Central Asia in 1924 to 1936, the Uzbek Soviet Socialist Republic, the Kyrgyz Soviet Socialist Republic, the Tajik Soviet Socialist Republic, and the Turkmen Soviet Socialist Republic were created.

The Bolsheviks ${ }^{1}$ encountered difficulty in spreading their ideas in Central Asia, which didn't possess homegrown Communist Party organizations: Pan-Islamism and Pan-Turkism exerted a major influence, while ruling over diverse ethnic groups was a problem. Accordingly, the Bolsheviks adopted a policy of divide and rule. Through allocating unique languages while ignoring the major languages that had historically been used across ethnic lines, the Bolsheviks established ethnic groups (Nationarinosuchi) ${ }^{2}$ based primarily on language and split up the Turkik Muslim collective. They also conferred set territories including artificial borders and capital cities, and they aimed to create the Union of Soviet Socialist Republics through establishing the state machinery, i.e. communist parties, in each so-called republic. At this time, the Bolsheviks executed an extremely complicated strategy entailing the following measures ${ }^{3}$ :

- Smashing the predominant transnational awareness (Islamism, Pan-Turkism and Persian culture);
- Adopting a divide and rule policy that forced ethnic groups into confrontations over land and water;
- Devising new population divisions encouraging people to entrust all things including their sense of belonging to the Soviet; and

[^32]- Obtaining a means of interfering beyond national borders through championing transnational ethnic unity ${ }^{4}$.

These policies adopted during the Soviet era have had a profound influence on the social and political conditions of the Central Asian republics following their declarations of independence. Even after the republics gained independence following collapse of the Soviet Union, they adopted the Soviet techniques of smashing transnational awareness and forming "nation states" based on units of ethnic groups. Even though the principle of ethnic belonging has been adopted as the basis for dividing territory, in reality the ethnic divides do not coincide with actual national borders. Moreover, irrationalities abound in that enclaves exist within countries, while it is sometimes necessary to cross national borders just to get from one major city to another in the same country. The root of such problems lies in the former Soviet policies that were intended to prevent the Central Asian republics from realizing independent rule. Now that the republics have become independent, this policy has bequeathed a legacy of skirmishes between ethnic groups and national confrontations over water and electricity and so on.

Table 1-1 Main Events in Central Asia

| Date | Uzbekistan | Kazakhstan | Kyrgyz Republic | Tajikistan | Turkmenistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $18-19^{\text {th }}$ centuries | Rule by the khanates of Bukhara, Khiva and Kokand |  | Rule by the Kokand Khanate (second half of the $18^{\text {th }}$ century - first half of the $19^{\text {th }}$ century) | Rule by the khanates of Bukhara and Kokand |  |
| $\sim 1820$ s |  | Fall of Kazakhstan (apart from the south) under direct rule of the Russian Empire |  |  |  |
| 1837-1847 |  | The Kenesar rebellion (by Kazakhs against the Russians) |  |  |  |
| 1850-1860s |  | Annex of Southern Kazakhstan by the Russian Empire, placing the whole country under Russian imperial rule (large-scale colonization by Russian farmers) |  |  |  |
| 1855-1876 |  |  | Annexation into the Russian Empire |  |  |
| 1860s |  |  |  | Annexation of the current north of Tajikistan into the Russian Empire |  |
| 1860-1970s | Conquest of Central Asia by the Russian Empire |  |  |  |  |
| 1867 | Establishment of the Turkestan Governorate in Tashkent, and the start of colonial rule by the Russian Empire |  |  |  |  |
| 1869 |  |  |  |  | Landing of the Russian army on the east coast of the Caspian Sea and founding of Kalsnovotsk (present territory of Turkmenistan) |
| 1881 |  |  |  |  | Battle of Geok Depe (a bitter fight between the Russian army and Turkmen) |
| 1885 |  |  |  |  | Completion of the conquest of Turkmenistan by the Russian Empire |
| 1880-1888 |  |  |  |  | Rapid expansion of raw cotton cultivation for Russia following opening of the Caspi Railroad |
| 1890s |  |  |  | Annex of most of the Pamir region into the Russian Empire |  |
| 1918 | Establishment of the Turkestan Autonomous Soviet Socialist Republic as part of the Russian Soviet Federative Socialist Republic |  | Following the Russian Revolution, became part of Turkestan Autonomous Soviet Socialist Republic in the Russian Soviet Federative Socialist Republic |  |  |
| 1920 | Establishment of the Soviet Bukhoran People's Republic and Soviet Khorazam People's Republic | Establishment of the Kyrgyzs Autonomous Soviet Socialist Republic as part of the Russian Soviet Federative Socialist Republic (capital in Orenburg) |  |  |  |

[^33]| Date | Uzbekistan | Kazakhstan | Kyrgyz Republic | Tajikistan | Turkmenistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 | Establishment of the Uzbek Soviet Socialist Republic based on the demarcation of republican borders along ethnic lines in Central Asia | Revision of the national borders based on the demarcation of republican borders along ethnic lines in Central Asia | Became Kara-Kyrgyz <br> Autonomous Oblast within the Russian Soviet Federative Socialist Republic based on the demarcation of republican borders along ethnic lines in Central Asia | Establishment of Tajik Autonomous Soviet Socialist Republic within the Uzbek Soviet Socialist Republic based on the demarcation of republican borders along ethnic lines in Central Asia | Establishment of the Turkmen Soviet Socialist Republic based on the demarcation of republican borders along ethnic lines in Central Asia |
| 1925 |  | Transfer of the capital from Orenburg to Kyzylorda and change of the country name to Kazakh Autonomous Soviet Socialist Republic |  |  |  |
| 1926, February |  |  | Establishment of Kirghiz Autonomous Soviet Socialist Republic |  |  |
| 1929 |  | Transfer of the capital to Almaty (Alma-Ata) |  | Cession from the Uzbek Soviet Socialist Republic and elevation to the Tajik Soviet Socialist Republic |  |
| 1936 |  | Elevation to the Kazakh Soviet Socialist Republic, forming part of the Soviet Union | Cession from the Russian Soviet Federative Socialist Republic and elevation to the Kirghiz Soviet Socialist Republic forming part of the Soviet Union |  |  |
| 1986, December 1 |  | Alma-Ata incident (suppression by police and troops from the Ministry of Internal Affairs of demonstrations protesting the dismissal of First Secretary of the Communist Party of Kazakhstan Konayev) |  |  |  |
| 1989, June | Fergana incident (ethnic clashes between Uzbeks and Meskhs) |  |  |  |  |
| 1990, February |  |  |  | Dushanbe incident (riots triggered by demonstrations protesting the relocation of Armenian refugees) |  |
| 1990, March | Inauguration of President Karimov |  |  |  |  |
| 1990, April 24 |  | Inauguration of President Nazarbayev |  |  |  |
| 1990, June |  |  | Osh incident (ethnic clashes between Kyrgyz and Uzbeks) |  |  |
| 1990, June 20 | Declaration of sovereignty of the republic |  |  |  |  |
| 1990, August 22 |  |  |  |  | Declaration of sovereignty of the republic |
| 1990, August 23 |  |  |  | Declaration of sovereignty of the republic |  |
| 1990, October |  |  | Inauguration of President Akayev |  |  |
| 1990, October 25 |  | Declaration of sovereignty of the republic |  |  |  |
| 1990, October 27 |  |  |  |  | Inauguration of President Niyazov |
| 1990, December 12 |  |  | Change of country name to "Kyrgyz Republic" and declaration of sovereignty |  |  |
| 1991, August 31 | Declaration of independence of the republic, and change of country name to the "Republic of Uzbekistan" |  | Declaration of independence of the republic | Change of country name to the "Republic of Tajikistan" |  |
| 1991, September 9 |  |  |  | Declaration of independence of the republic |  |
| 1991, October 27 |  |  |  |  | Declaration of independence of the republic |
| 1991, December 1 |  | Reelection of President Nazarbayev |  |  |  |
| 1991, December 10 |  | Change of country name to the "Republic of Kazakhstan" |  |  |  |
| 1991, December 16 |  | Declaration of independence of the republic |  |  |  |
| 1992, May |  |  |  | Degeneration into a state of civil war |  |
| 1992, May 16 |  |  |  |  | Adoption of the republic constitution |
| 1992, November 19 |  |  |  | Inauguration of Emomali Rahmonov as Speaker of the Supreme Council |  |
| 1992, December | Reelection of President Karimov |  |  |  |  |
| 1993, May |  |  | Change of country name to "Kyrgyz Republic" |  |  |


| Date | Uzbekistan | Kazakhstan | Kyrgyz Republic | Tajikistan | Turkmenistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1994, November <br> 6 |  |  |  | Election of President Rahmonov |  |
| 1995, March | Extension of President Karimov's term of office by referendum |  |  |  |  |
| 1995, December |  |  |  |  | Approval as a permanently neutral state at the United Nations General Assembly |
| 1997, June 27 |  |  |  | Signing of the peace agreement bringing the civil war to an end |  |
| 1997, December 10 |  | Transfer of the capital from Almaty to Aqmola (the present Astana) |  |  |  |
| 1999, January 10 |  | Reelection of President Nazarbayev |  |  |  |
| 1999, November <br> 6 |  |  |  | Reelection of President Rahmonov |  |
| 1999, December 28 |  |  |  |  | Unanimous approval by the diet for declaration of President Niyazov as President for Life |
| 2000, January | Reelection of President Karimov |  |  |  |  |
| 2005, April |  |  | Resignation of President Akayev following political turmoil |  |  |
| 2005, May | Andijon incident |  |  |  |  |
| 2005, July |  |  | Election of President Bakiyev |  |  |
| 2005, December |  | Reelection of President Nazarbayev |  |  |  |
| 2006, November $6$ |  |  |  | Reelection of President Rahmonov |  |
| $\begin{aligned} & \hline 2006, \text { December } \\ & 21 \end{aligned}$ |  |  |  |  | Death of President Niyazov |
| 2007, February 14 |  |  |  |  | Inauguration of President Berdymukhamedov |
| 2007, December | Reelection of President Karimov |  |  |  |  |

Source: Prepared from the Ministry of Foreign Affairs Website
(http://www.mofa.go.jp/mofaj/area/europe.html as of June 2009)

## - Current Political Situation in Central Asia

Concerning political setups in the Central Asian republics, each country adopts varying degrees of authoritarianism based around a president. Moreover, political systems are characterized by political factionalism based on local areas, connections and family loyalties.

Table 1-2 Political Systems in the Countries of Central Asia

|  | Uzbekistan | Kazakhstan | Kyrgyz Republic | Tajikistan | Turkmenistan |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Political <br> Regime | Republic | Republic | Republic | Republic | Republic |
| Head of <br> state | President Islom <br> Karimov | President <br> Nursultan <br> Nazarbayev <br> (elected to a <br> third term of 7 <br> years in <br> December 2005) | President <br> Kurmanbek <br> Bakiev (entered <br> office in August <br> 2005 with a term <br> of 5 years) | President <br> Emomali <br> Rahmon (elected <br> to a term of 7 <br> years in <br> November 2006) <br> (name changed <br> from Rahmonov <br> to Rahmon in <br> April 2007) | President <br> Gurbanguli <br> Berdymukhamed <br> ov (entered <br> office in |


|  | Uzbekistan | Kazakhstan | Kyrgyz Republic | Tajikistan | Turkmenistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Parliament | Bicameral <br> system <br> Term of office: 5 <br> years <br> Upper chamber: <br> Senate (100 <br> seats) <br> Lower chamber: <br> Legislative <br> chamber (120 <br> seats) <br> Latest election: <br> December 2004 | Bicameral <br> system <br> Upper chamber: <br> Senate (47 seats, <br> 6-year term (half the members are elected every three years) <br> Lower chamber: <br> Mejlis 107 seats, 5-year term) | Unicameral system <br> Jogorku Kenesh: <br> 90 seats <br> The bicameral system was changed to a unicameral system under constitutional reform in 2003 Number of seats increased from 75 to 90 following adoption of the New Constitution in October 2007 | Bicameral system <br> Upper chamber: <br> National <br> Assembly (34 <br> seats, 5-year <br> term) <br> Lower chamber: <br> Assembly of <br> Representatives <br> (63 seats, 5 -year <br> term) <br> Latest lower <br> chamber <br> election: <br> February 27, <br> 2005 | Unicameral system Mejlis: 50 seats, 5-year term |

Source: Ministry of Foreign Affairs of Japan Website (http://www.mofa.go.jp/mofaj/area/europe.html as of June 2009)

Box 1-1 Key Issues to Analyze Central Asia
When analyzing Central Asia over the past five years since 2004, it is necessary take the following changes and features into account in addition to the points mentioned in the main text.

The first point concerns upheavals in the economic environment. As a result of inflation in international prices of petroleum and gas between 2003 and 2008, economic disparities have increased between the petroleum and gas exporting nations that have benefited from this (Kazakhstan and Turkmenistan), and the countries which, although receiving some indirect benefits, are not blessed with petroleum and gas resources (Kyrgyz Republic and Tajikistan). Moreover, high-level economic growth of around $10 \%$ in Russia and Kazakhstan has led to more emigrant workers moving to these countries from non-oil producing nations and sending remittances back home, while at the same time there has been a vitalization of investment activities by Russian and Kazakh capital in foreign countries including the other Central Asian republics. Although there has been some economic spillover from the oil-producing countries to non-oil producing countries, income disparities have grown among the Central Asian republics. Even Uzbekistan faces a marked disparity with Kazakhstan despite having a relatively balanced framework of agricultural and energy production and benefiting from remittances sent by migrant workers in Kazakhstan.

However, rapid inflation from 2008 onwards and the onset of the global financial and economic crisis in the fall of that year have caused a reverse flow of labor and funds in the Central Asian countries. Remittances back home by emigrant workers in Russia and Kazakhstan have decreased, while more jobless workers are returning home. Conditions are especially complicated in Kyrgyz Republic and Tajikistan, where the sudden drop in international energy prices in the second half of 2008 has not immediately
led to price falls but there is still a need to take emergency economic stimulus measures amidst ongoing inflation. Moreover, these countries are being forced to address risks such as a sharp decline of foreign currency reserves, growing unemployment against a backdrop of stagflation, poverty and other issues with the potential to cause social and political instability. President Islom Karimov of Uzbekistan claims that Uzbekistan has the strength to resist the current economic crisis and is stressing the success of a gradualist transition strategy as opposed to a radical policy. However, the number of Uzbek emigrant workers in Russia and Kazakhstan is said to be 3 million, far more than the official estimates, and the decline in remittances from these workers is having serious impacts. Within the current economic crisis, Russia is strengthening moves to incorporate Central Asia and former Soviet territories, and this is one of the factors behind the reorganization of the Central Asian countries.

The second point is that Central Asia is now in a phase of power transition between political leaders. The leaders that assumed power following the Soviet era are either becoming old or have been replaced due to political upheaval (for example, the "Tulip Revolution" of Kyrgyz Republic in March 2005) or death by natural causes (Turkmenistan at the end of 2006), and a new generation of leaders are appearing. President Nursultan Nazarbayev of Kazakhstan (elected to a third term of 7 years in December 2005) and President Islom Karimov of Uzbekistan (elected to a third term of 7 years in December 2007) are veterans who served as first secretaries of their respective republic communist parties during the Soviet era, and the issue of their successors will be highly significant for the future of these countries. In Tajikistan, President Emomali Rahmon was first elected in November 1994 and reelected in November 2006. The next presidential election is scheduled for 2013, however, President Rahmon is young (born in 1952) and it is still too early to consider the issue of a successor. Attention from home and abroad is being directed towards Turkmenistan, where President Berdymukhamedov (born on June 29, 1957) appears to be gradually changing the governing style of former President Niyazov, who passed away on December 21, 2007.

The third point concerns the fact that each country has built a unique economic system suited to the conditions in each. Market economy transition policies in Kyrgyz Republic and Kazakhstan have been advanced as part of a radical policy program and have even extended to the private ownership of farmland. On the other hand, in Uzbekistan, Tajikistan and Turkmenistan, there is little sign of shift in the principle of national ownership of land. In particular, Turkmenistan is steadfastly holding on to the economic systems of the Soviet era. Uzbekistan has retained strong state control and leadership in economic affairs, and its shift to the market economy has been gradual. In Tajikistan, efforts to adopt the market economy and rebuild the economy were handicapped by civil war. While aiming for radical reforms, it is also necessary to take social factors such as poverty and so on into consideration, so the government is taking a careful approach to reform in the social sector. Against such a backdrop of differing economic policies in Central Asia, each country is experiencing a groundswell of resources nationalism linked to reserves of petroleum, gas and water. In particular, problems surrounding water and energy resources and electric power are becoming increasingly severe for each country, and issues concerning the development of such resources are exerting a major impact on international relations between the Central Asian republics.

The fourth point concerns the changes in the international environment surrounding Central Asia. Following the 9/11 terrorist attacks in the United States in 2001, the Central Asian republics permitted the American Army to establish military installations
on their territories, thereby allowing the United States to make inroads into an area that was considered the backyard of Russia during the Soviet era. Also, China is strengthening its commitment to Central Asia in multilateral relations based on the Shanghai Cooperation Organization (SCO) and bilateral relations based on economic assistance. These moves are linked to China's desire to develop markets in line with its economic growth, to counter the impacts of the Uyghur independence movement and Islamic extremists in China, and to diversify supply routes for petroleum and gas. Meanwhile, Russia is increasingly nervous over the gradual eastward expansion of NATO (North Atlantic Treaty Organization) and in particular developments in Ukraine, and it is striving to regain lost ground in the Caucasus and Central Asia to counter this. Ever since the 2003 "Rose "Revolution" in Georgia, Russia has been wary of the Eurasian strategy of the West and especially the United States. The issue of American military installations in Central Asia is also having an impact on Russia's aggressive policies in that region. Moreover, in view of the Afghanistan strategy of the Obama administration, the strategic importance of Central Asia has been enhanced even more.

The fifth point concerns the question of how to maintain distance with Russia, which is always at the forefront of security affairs in Central Asia. Almost all the Central Asian countries have pursued a path of omnidirectional diplomacy, while Uzbekistan has wavered to extremes in its relations with Russia and the United States. Following the 9/11 terrorist attacks, Uzbekistan permitted American Air Force installations on its territory and adopted a pro-American stance; however, when the United States sought the facts surrounding the Andijon incident that occurred on May 13, 2005, Uzbekistan retaliated by demanding that the Americans pull out from the Khanabad Air Base within six months from July 29 that year. After that, President Karimov flew to Moscow and concluded a mutual security agreement with Russia. However, signs of distancing from Russia have been observed in Uzbekistan from August 2008.

## 1-1.2 Turkmenistan

## [Key Events]

- Saparmurat Atayevich Niyazov became the First Secretary of the Communist Party of the Turkmen SSR in 1985 and after that consistently played the role of a political leader in the country. It was under his leadership that the Mejlis declared sovereignty in October 1990, and Niyazov was elected as President of the Soviet Socialist Republic of Turkmen by referendum at this time. Turkmenistan declared its independence in October 1991, prior to dissolution of the Soviet Union, and President Niyazov was reelected as President of the Republic of Turkmenistan in line with establishment of the new Constitution in June 1992. Turkmenistan received international criticism over human rights issues and for running counter to democratization following the absolute exclusion of opposition political parties and factions and establishment of an autocratic system based on authoritarianism and a cult of personality surrounding the president.
- Following the demise of the president in December 2006, presidential elections involving multiple candidates were held for the first time on February 11, 2007. As a result, acting president Berdymukhamedov (former Deputy Prime Minister and Health Minister) won almost $90 \%$ of the vote and was inaugurated as the new President on February 14.
- Under the constitutional reform that was adopted in September 2008, political activities were reformed with the abolition of the supreme decision making body, the Halk Maslahaty, which was composed of members appointed by the President, and empowerment of the Mejlis parliament, which is composed of representatives decided by election, and so on. Moreover, in the parliamentary elections held in December that year, Turkmenistan for the first time accepted international observers including the Organization for Security and Co-operation in Europe (OSCE).


## - Demise of President Niyazov and Emergence of President Berymukhamedov

Turkmenistan declared its independence in October 1991 and enacted its new Constitution in May 1992. President Niyazov served as the First Secretary of the Communist Party of the Turkmen SSR prior to the country's independence and then held the position of supreme leader following independence. At the $25^{\text {th }}$ Assembly of the Communist Party of the Turkmen SSR that was held in December 1991, the party was renamed the Democratic Party of Turkmenistan, however, since then no other political parties have been allowed and a single-party system has been maintained. The Party for Democratic Development (a separate entity from the Democratic Party of Turkmenistan), which had its base of operations in Asgabat, and the Unity Party (Agzybirlik) were formed, however, they have been banned and now their members only conduct activities in overseas countries. In view of Turkmenistan's refusal to permit multiple political parties and the fact that it is a single-party state, conditions are little different from the Soviet era and the democratization process here has been the slowest out of the five Central Asian republics.

When President Niyazov suddenly passed away on December 21, 2006, there was concern that this would trigger a power struggle among potential successors, however, former Deputy Prime Minister and Health Minister Gurbanguly Berdymukhamedov was appointed as acting president on the same day. Öwezgeldi Ataýew, the Chairman of the Parliament of Turkmenistan, would normally have been appointed as the acting President, however, he was arrested the same day on charges of corruption. Berdymukhamedov was elected as the new president on February 11, 2007, marking an end to the successor struggle. The new Cabinet appointed by the President (who also serves as the Cabinet leader) was more or less the same except for a few minor changes. The post of prime minister has been abolished, although there are nine deputy prime ministers.

## - Domestic Affairs under the New President

In the constitutional reform that was enacted in September 2008, President Berdymukhamedov changed the bicameral system to a unicameral system and strengthened the powers of the parliament (Mejlis). The number of seats in the Mejlis was increased from 65 to 125, while the Halk Maslahaty was autonomously disbanded. The new system was solidified with the staging of Mejlis elections on December 14, 2008, although almost all candidates belonged to the Democratic Party of Turkmenistan and the situation was more or less the same as before. Having said that, some moves towards democratization were observed with the acceptance of international election observers including the OSCE and standing of multiple candidates for single seats and so on. On the other hand, the trend of decentralization was once more reversed in the direction of centralization with the strengthening of presidential powers to appoint provincial governors and other local heads.

President Berdymukhamedov has inherited many of the ruling techniques of his predecessor

President Niyazov, however, he is also displaying his own style. Being a former doctor, the new President is interested in enhancing the level of science and technology and is striving to expand overseas exchanges in the fields of natural science and technology, albeit on a partial scale. In terms of transparency regarding the actual state of the economy and fiscal structure, Turkmenistan is the least advanced of the Central Asian countries, and official statistics released by the government are extremely unreliable. The extent to which transparency can be improved will be an important issue in Turkmenistan's efforts to improve its international economic relations from now on.

Table 1-3 Main Political Parties in Turkmenistan

| Ruling party (single-party autocracy) | Opposition parties (banned but active overseas) |
| :---: | :--- |
| Democratic Party of Turkmenistan | Party for Democratic Development (a separate entity from the <br> Democratic Party of Turkmenistan) <br> Unity Party (Agzybirlik) |

Source: Prepared by the Study Team

## Box 1-2 State Structure of Turkmenistan

Turkmenistan is viewed as a typical "rentier state." This refers to a political regime that grants economic benefits in exchange for democratic freedoms on the foundation of an economy dependent on the outside (especially the acquisition of foreign currency through export of natural resources). Such a political system is possible because the population is only around 5 million. Turkmenistan has been extremely slow to introduce market economic reforms, and it retains systems from the Soviet era more than any other Central Asian state. Electricity, water and gas tariffs are free, while housing expenses are limited to a certain percentage of income. Such policies are financially supported by exports of natural gas. The export price of gas is determined in negotiations with the Russian enterprise Gazprom based on the export routes that were developed during the Soviet era. Turkmenistan is aiming to diversify supply destinations and thereby enhance its bargaining power, and the issue of pipeline routing is an important problem attracting the direct involvement of the President. Close attention is being paid to the impact on the Turkmenistan economy of the decline in gas prices linked to the fall in oil prices from the second half of 2008.

## 1-1.3 Kyrgyz Republic

## [Key Events]

- Following the declaration of independence in 1991, Kyrgyz Republic launched a rapid package of reforms based on democratization and transition to the market economy under former President Akayev, and it became the first of the Central Asian republics to join the World Trade Organization (WTO) in 1998. However, having scarce natural resources except for gold mines and so on. Kyrgyz industries were buffeted by intense international competition upon joining the WTO, and citizens were unable to experience the benefits of economic reform.
- In these circumstances, the anti-government campaign led by opposition parties gradually gained momentum, and anti-government protests triggered by corrupt parliamentary elections at the end of February 2005 spread from the south of the country to the capital Bishkek. In March 2005, the Akayev administration collapsed and Kurmanbek Bakiyev, former Prime Minister and the leader of the opposition parties, was elected as President and Prime Minister. Mr. Baikyev was successful in the presidential elections held in July that year and was inaugurated as President in August.
- However, little progress was made in political and economic reforms and the political instability continued under President Bakiyev. In November 2006, a confrontation between President Bakiyev and opposition parties in parliament concerning constitutional reform intensified, and the Kulov cabinet resigned en masse in December that year. The ensuing Isabekov cabinet quickly ended, and President Bakiyev responded by appointing Almazbek Atambayev, leader of the Social Democratic Party of Kyrgyzstan, as Prime Minister with a view to appeasing some of the opposing factions. Opposing factions led by former Prime Minister Kulov staged an anti-Bakiyev movement in April that year, however, this ended in failure.
- In September 2007, the Constitutional Court of Kyrgyz Republic ruled that two packages of amendments adopted in November and December 2006 were both invalid, and a new constitutional bill and electoral law bill proposing introduction of a party-separate proportional representation system and expansion of the number of parliamentary seats, etc. were passed by referendum in October 2007. As a result, the new President's Ak Zhol Party won the most seats. Presidential elections are scheduled for July 2009.


## - The Tulip Revolution

Kyrgyz Republic declared its independence in August 1991. The first president of the newly independent country, Askar Akayev (term of office: 1990-March 2003), was formerly the President of the Kyrgyz Academy of Sciences and differed from the political leaders of other Central Asian republics in that he had not previously served as First Secretary of the Communist Party. The new Constitution was approved in a referendum held on May 5, 1993, and presidential authority was further strengthened in two more referendums in February 1996 and February 2003. Following the parliamentary elections held in February 2005, the Jogorku Kesh (national diet) became a unicameral body comprising 75 seats with members serving terms of five years. The Tulip Revolution happened in March 2005, forcing President Akayev to flee to Kazakhstan when the anti-government protests spread to the capital. President Akayev subsequently moved to Moscow and initially refused to step down, however, he eventually announced his resignation from Moscow. Kurmanbek Bakiev, a native of the southern province of Jalal-Abad (born in 1949) and leader of the opposition movement, was elected as acting President and Prime Minister and was officially elected President in the presidential elections held in July 2005. President Bakiev appointed Felix Kulov as the new Prime Minister, however, Kulov subsequently became an opposition member. The Tulip Revolution was similar to the November 2003 Rose Revolution in Georgia and the January 2005 Orange Revolution in Ukraine, although there were also numerous differences. The former president was driven from office with less resistance than expected, and it is likely that the opposition factions did not expected to overthrow the government so easily. Furthermore, even though this incident is referred to as a "revolution," apart from some strengthening of nationalist policies in the aftermath, no major changes have been witnessed in the country's
policies as a result.

## Vulnerable Presidential System

Bowing to pressure from opposition parties, the Constitution that was enacted in November 2006 curtailed the authority of the president while strengthening the authority of parliament. The most striking feature of the November 2006 Constitution was the fact that it partially limited presidential authority through recognizing the right of parliament to appoint the Prime Minister and so on. Under this Constitution, the political party gaining a majority of seats in the parliament would have the right to nominate the prime minister, subject to approval by the president. In the event where no single party obtained a clear majority, the president would be required to form a coalition majority.

However, the presidential factions sought to reestablish authority through enacting further constitutional revisions in December 2006 and 2007. In the referendum that was implemented in October 2007, a new Constitutional bill and electoral law bill proposing among other things the introduction of a party-separate proportional representation system and expansion of the number of parliamentary seats to 90 were established, and the President dissolved the Jogorku Kenesh before the expiration of the term. In the subsequent parliamentary elections held on December 16, the new President's Ak Zhol Party won approximately $80 \%$ of seats, while around $40 \%$ of the votes were declared void. As a result, the Ak Zhol Party secured an overwhelming majority in the Jogorku Kenesh and succeeded in building a setup that could overcome the curtailment of presidential authority under the Constitution. Unlike the other Central Asian republics, where political party activities exist in name only, the activities of political parties in Kyrgyz Republic have a certain degree of significance. Although the base of President Bakiyev has been strengthened, the activities of opposition parties cannot be ignored and demonstrative activities sometimes happen in public.

In addition to the ruling Ak Zhol Party, there are numerous political parties in Kyrgyz Republic (see Table 1-4). Many of these parties claim irregularities in the 2007 elections and tend to resort to extra-parliamentary activities. In particular, it is possible that the economic crisis in Kyrgyz Republic triggered by the global financial crisis of 2008 will be used to promote populist political activities. The next Jogorku Kenesh elections are scheduled for December 2012, while the next presidential election will be held on July 23, 2009. It appears certain that President Bakiev will be reelected, however, political stability cannot be judged from election results alone. It should be noted that the outcome of economic crisis countermeasures could exert a major impact on the political situation.

Table 1-4 Major Political Parties in Kyrgyz Republic

| Ruling Party | Opposition Parties |
| :--- | :--- |
| Ak Zhol | - Has an 80\% majority in parliament |
|  | - SDPK: Social Democratic Party of Kyrgyzstan |
|  | - KPK: Communist Party of Kyrgyzstan |
|  | - Socialist Party Ata-Meken |
|  | - Alga: Progress |
|  | - Kyrgzstan! |
|  | - Adilet: Equity |
|  | - Ar-Namys: Respect |
|  | - Asaba: Banner |
|  | - DPWK: Democratic Party of Women of Kyrgyzstan |
|  | - Erkindik: Freedom |
|  | - Mekenim: Fatherland |
|  | - Kyrgyzstan Movement |


| Ruling Party | Opposition Parties |
| :--- | :--- |
|  | - Moya Strana: Our Fatherland |
|  | - Progressive-Democratic Party Erkin Kyrgyzstan (ErK) |
|  | - PKK Party of Communists of Kyrgyzstan |
|  | - PP Protection Party |
|  | - RPP Republican People's Party |
|  | - Ak Shumkar, etc. |

Source: Prepared by the Study Team

## 1-1.4 Tajikistan

## [Key Events]

- Following the declaration of independence in 1992, conflict between factions loyal to the former Communist Party and anti-establishment forces including Muslims intensified and escalated into a civil war. The presidential system was replaced by a congressional system in November that year, and Emomali Rahmonov (now renamed Rahmon) became the Speaker of Parliament. Rahmonov promoted aggressive diplomacy requesting dispatch of a CIS joint peace keeping force and aiming to restore peace in the country. In 1994, a provisional peace agreement was reached and the United Nations Security Council dispatched UNMOT: United Nations Mission of Observers in Tajikistan. Moreover, the presidential system was restored in November that year, and Rahmon won $60 \%$ of the vote in the subsequent presidential elections. Intermittent conflict continued until a final peace accord was reached in June 1997, and this civil strife claimed the lives of approximately 60,000 people.
- The peace process was finally completed following the implementation of a referendum on constitutional reform in September 1999, the presidential election of November 1999 and the parliamentary elections of 2000. UNMOT completed its mission and was replaced by UNTOP: United Nations Tajikistan Office of Peace-building (UNTOP completed its mission in 2007).
- In the presidential election that was held in November 2006, President Rahmon was reelected after securing a landslide victory with around $80 \%$ of the vote.
- The situation in neighboring Afghanistan has a major impact on Tajikistan. Although the security threat has receded following the collapse of the Taliban rule, incursions by terrorists and smuggling of weapons and narcotics from Afghanistan are serious problems for Tajikistan.


## - Independence and Civil War in Tajikistan

The Tajik Soviet Socialist Republic was renamed the Republic of Tajikistan on August 31, 1991, and it declared its independence from the Soviet Union on September 9, 1991. Rahmon Nabiyev, who had served as the First Secretary of the Tajik Communist Party during the 1980s, became the new President, however, citizen factions and Islamists opposed to rule by the old Communist guard launched an anti-government campaign and the country fell into a state of civil war. This conflict claimed approximately 60,000 lives and exacted a heavy toll on Tajikistan, which was already the poorest of the former Soviet republics. The causes of the civil war were complicated, however, as the background to the conflict, independence led to the loosening of harsh political constraints and emergence of various contradictions from the Soviet
era. First, there was resentment over the fact that leaders of the Tajik Communist Party during the Soviet era had predominantly come from the second city of Leninabad (now called Khujand) in the north. And second, opposition to the systems of the Soviet era by Islamic factions typified by the Islamist Renaissance Party became manifest. In other words, the civil war in Tajikistan was a conflict between old guard factions of the Communist Party that had conventionally held onto power and citizen and Islamist factions calling themselves democratic reformers.

The Republic of Tajikistan was also born out of the Soviet policy of demarcation along ethnic lines that was initiated in 1924, and it developed with the following characteristics. First, when the former Kingdom of Bukhara was partitioned, the important cities of Bukhara and Samarkand were given to Uzbekistan, while the minor city of Dushanbe became the capital of Tajikistan. Later, Khujand in the Fergana Valley was added to Tajikistan as compensation, however, a lot of dissatisfaction remained festering among the Tajik people. The territories of Uzbekistan and Tajikistan following independence have been fixed based on the Soviet demarcation, however, this historical backdrop is one of the factors behind the deep mistrust that still exists between the two countries.

The civil war in Tajikistan had an immediate impact on the situation in Afghanistan, where Pashtuns are the primary ethnic group accounting for around half of the population, while Tajiks are the second largest group accounting for between $20 \sim 30 \%$. Indeed, there may be more Tajik people in Afghanistan than there are in Tajikistan. Many of the Afghanistan Tajiks lives in the north of the country, and some Tajik refugees escaped into the north of Afghanistan during the civil war.

Meanwhile, in Afghanistan, following the withdrawal of Soviet forces in 1988, civil strife broke out between militias especially after 1992. The Taliban, which appeared in 1994, wiped out the other militias, and the anti-Taliban Northern Alliance was driven into the Panjshir Valley, which accounts for around $10 \%$ of the national land area in the north. In order to reconsolidate the anti-Taliban movement, the leader of the Northern Alliance, Ahmad Shah Massoud, sought support from anti-Taliban factions in Iran, Russia, India, Uzbekistan and Tajikistan, etc. At the same time, it was essential that political stability be restored in Tajikistan, which was adjacent to the stronghold of the Northern Alliance.

Since the civil war in Tajikistan was highly inconvenient for Massoud, he became actively involved in mediating the conflict from outside. Specifically, he sought to persuade the Islamist Renaissance Party to adopt a more flexible attitude towards the government. In addition, with the involvement of the United Nations and surrounding countries, this meant that a complex set of dynamics were at work in securing an end to the civil war. The description here serves merely to indicate that the civil war in Tajikistan was interconnected with the situation in Afghanistan, however, in view of the extreme importance of Afghanistan relations for Tajikistan, it is essential to look at the impact conditions in Afghanistan exert on Tajikistan. The National Accord was signed in 1997, finally marking the end of Tajikistan's civil strife and paving the way for the country to restore its economy and rebuild the state.

## - Political System in the post Civil War period

Under the Constitution of Tajikistan, the President is the head of government and has the right to appoint the Prime Minister. The technique of frequently replacing cabinet members and high-ranking bureaucrats is a common approach adopted in other Central Asian countries. Following the end of the civil war, the authority of the President has been steadily bolstered and, under the constitutional reforms that were approved by referendum on September 26, 1999, the term of office of the President was extended from five to seven years. The Parliament is a
bicameral system comprising a lower chamber with 63 seats and an upper chamber with 33 seats. President Rahmonov was reelected in the presidential election held on November 6, 2006; moreover, the ruling party won landslide victories in the lower house election held on February 27, 2005 and the upper house election held on March 24, 2005. The next parliamentary elections are scheduled for February 2010, while the next presidential election will be held in 2013. There is a strong likelihood that the next parliamentary elections will give expression to stiff criticism of the government.

The ruling political party is the People's Democratic Party (PDP), which was founded by renaming the former Communist Party. A multiple party system has been established, however, the ruling party is dominant. The National Accord was agreed with the Islamic Renaissance Party (IRP), which was the prime mover in the United Tajik Opposition (UTO). Tajikistan is the only Central Asian republic that legally recognizes an Islamic political party. The IRP takes part in elections and aims to achieve its goals by peaceful means, however, its influence is waning. The Islamic Liberation Party is also making progress in Tajikistan, however, it is in conflict with the IRP. The government accepts the domestic trend towards Islamist renaissance, however, at the same time the issue of how to quell Islamic extremism is one of its biggest challenges. Tajikistan still contains elements of instability such as festering dissatisfaction in the provinces, however, considering the situation in neighboring Afghanistan, destabilization of the political situation in Tajikistan is not a desirable option. Accordingly, the United States and Russia have a vested interest in ensuring the continued stability of Tajikistan.

Table 1-5 Main Political Parties in Tajikistan

| Ruling Party (dominant party) | Opposition Parties |
| :---: | :---: |
| PDP: People's Democratic Party <br> * Renamed from the former Communist Party | -IRP: Islamic Renaissance Party <br> * The only country to have a legally recognized Islamic political party <br> - DP: Democratic Party <br> - Communist Party <br> - Socialist Party <br> - SDP: Social Democratic Party <br> - Agrarian Party <br> - PER: Party of Economic Reforms |

Source: Prepared by the Study Team

## 1-2 Social Changes and Current Conditions

## 1-2.1 Central Asia in General

## - Cultural and Social Conditions

Almost 18 years have passed since the republics of Central Asia achieved independence, and during this time, the construction of appropriate political and administrative organizations, implementation of economic reforms including transition to the market economy, and the development of directional ideology for fostering national identity have been important issues in the fledgling republics. Nationalism based on nominal ethnic groups has been purported as the ideology to govern national peoples in the place of Marxism-Leninism. Although the new
nationalism is based on nominal ethnic groups ${ }^{5}$, such nationalism contains mixed strands of Turkic nomadic culture, Persian culture and reversion to traditional Islamic values, as well as Russian culture and the cultural legacies of the Soviet era.

Table 1-6 Ethnic Groups, Languages and Religions in the Central Asian Countries

|  | Uzbekistan | Kazakhstan | Kyrgyz <br> Republic | Tajikistan | Turkmenistan |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ethnic groups |   <br> Uzbek $(80 \%)$ <br> Russian $(5.5 \%)$ <br> Tajik $(5.0 \%)$ <br> Kazakh $(3.0 \%)$ | Kazakh(53.4\%)Russian (30\%) <br> Ukrainian <br> (3.7\%) <br> Uzbek <br> Uighur <br> (2.5\%) <br> Tartar <br> German (2.5\%) | Kyrgyz(64.9\%) <br> Uzbek (13.8\%) <br> Russian(12.5\%) <br> Dagestani(1.1\%) <br> Ukrainian(1.0\%) | Tajik (79.9\%) <br> Uzbek (15.3\%) <br> Russian (1.1\%) <br> Kyrgyz (1.1\%) <br> Others | Turkmenistani  <br> (85\%)  <br> Uzbek $(5 \%)$ <br> Russian $(4 \%)$ <br> Others  |
| Languages | Official <br> language: <br> Uzbek <br> Russian is also widely used | National language: Kazakh Official language: Russian | National language: Kyrgyz Official language: Russian | Official language: Tajik Russian is also widely used | Official language: Turkmen Russian is also widely used |
| Religion | Mainly Sunni Islamism | Mainly Sunni Islamism | Mainly Sunni Islamism | Sunni Islamism is predominant among Tajiks. In Pashmir, Ismail, which is a branch of Shi'a Islamism, is most common. | Mainly Sunni Islamism |

Source: Ministry of Foreign Affairs of Japan Website (http://www.mofa.go.jp/mofaj/area/europe.html as of June 2009)

[^34]

Source: Asia Society homepage (http://www.askasia.org/teachers/maps/map.php?no=22 as of June 2009)
Figure 1-1 Distribution of Major Ethnic Groups in Central Asia (1993)

## Box 1-3 Social and Cultural Issues in Central Asia

The first issue facing the Central Asian countries concerns their need not to excessively alienate citizens of Russian and Slav descent. Since Russians and Slavs occupied the majority of engineering and management posts during the Soviet era, an outflow of Slavic citizens would have a negative impact on economic reconstruction. Kazakhstan and Kyrgyz Republic in particular have given consideration to the citizens of Slav descent. It has been necessary to check excessive nationalism based on nominal ethnic groups. There was some movement of Slavic citizens to Russia and so on following independence, however, room still exists for Slavs to fill important bureaucratic positions in Kazakhstan and Kyrgyz Republic. Incidentally, the current Prime Minister of Kyrgyz Republic - Igor Chudinov - is of Russian descent.

The second issue concerns the fact that the reversion to nationalism based on nominal ethnic groups is still continuing. Central Asian nationalism comprises two types: region-wide nationalism such as Pan-Turkism, and the independent nationalism of each independent republic. Concerning Pan-Turkism, a Turkic summit meeting comprising Turkey, Azerbaijan and four Central Asian countries (Kazakhstan, Kyrgyz Republic, Uzbekistan and Turkmenistan) gives Turkey a vehicle to extend its influence. However, when it comes to actually unifying people, rather than the regional nationalism typified by Pan-Turkism, emphasis on unique ethnic nationalism, i.e. emphasis of uniqueness and differentiation with other Central Asian countries, is more important. Kyrgyz Republic has championed the epic lore hero Manas, while Tajikistan is emphasizing its status as the successor to the 9th century dynasty of Samarkand. In Turkmenistan, former President Niyazov wrote the Ruhnama (Book of the Soul), in which he claimed that all
dynasties having involvement by Turkic people should be credited to the Turkmen race and attempted to pervade extreme nationalism among citizens. Uzbekistan claims to be the successor of the Timur dynasty that ruled over Central Asia in the 14th and 15th centuries. However, such emphasis on nationalism within each country carries with it the risk of arousing ethnic confrontations between and within those countries.

The third issue concerns language. The Central Asian republics have adopted the languages of nominal ethnic groups as their national languages, however, due to the importance of Russian, this is granted the status of the actual or official language used between different races. Another problem concerns ethnic languages and the characters used to express them. Arabic letters were used to write Central Asian languages during the Islamic era, however, these were replaced with Latin letters in 1924 after the Russian Revolution. This was done with the intention of weakening or severing Islamic tradition. The Bolsheviks forced the countries to use Cyrillic alphabet (the same as for Russian) from the 1920s onwards. The reverse trend is occurring in the wake of independence: both Uzbekistan and Turkmenistan have changed many newspapers, literary works and public signs, etc. back to the Latin alphabet. In Kazakhstan and Kyrgyz Republic, where there are many citizens of Russian descent who speak Russian as their mother tongue, the Kazakh and Kyrgyz languages are still expressed in the Cyrillic alphabet. In Tajikistan, there was a campaign calling for the restoration of Arabic lettering immediately following independence, however, the Cyrillic alphabet is still in use. The differences in selected alphabet following independence partially reflect political objectives. The adoption of Latin lettering is advantageous for learning non-Slavic languages such as English and Turkish. However, the differences between Turkic languages are not small, and the distinctive vowel harmony and consonant harmony of Turkic languages have almost disappeared from the Uzbek language. Furthermore, writing methods also differ between different languages. On the other hand, the maintenance of the Cyrillic alphabet is beneficial for Russians and other citizens of Slavic descent when learning Kazakh and Kyrgyz, and it is also useful in sustaining relations with Russia and Slavic countries. Tajikistan's decision to retain the Cyrillic alphabet can be explained by considerations of the cost benefit of switching alphabets, the fact that calls for the restoration of Arabic have waned with the decline of the Islamic Renaissance Party, and the fact that relations with Russia remain important. Having said that, the number of citizens of Russian descent plummeted during the civil conflict in Tajikistan.

## - The Issue of Islamic Renaissance

Following their respective declarations of independence, the republics of Central Asia have had to enunciate Islamic renaissance in order to reinforce their own nationalism. However, in view of the proximity of Afghanistan, the part played by the Islamic Renaissance Party within anti-establishment factions during the civil war in Tajikistan, and the radical Islamic activities historically witnessed in the Fergana Valley in Uzbekistan, the countries of Central Asia have strenuously been very wary of Islamic renaissance escalating into anti-government movements. Accordingly, governments have had to maintain a careful balance between supporting Islamic renaissance while checking radicalism. Furthermore, the constitutions of each country clearly purport the separation of religion and politics that was established during the Soviet era, however, the steady progression of Islamic renaissance is forcing governments to take countermeasures. Uzbekistan has tried various initiatives with a view to bringing Islamism under state control. Most notably, the government has moved to support the Naqshbandi sect,
which is based on Sufi (Islamic mystic) tradition and differs from the ideological stream of the Uzbek Islamic movement. In 1999, the Tashkent Islamic University was established, and this has sought to define Islamism under the secularism of the Uzbek constitution while working on the restoration of the works of historical Islamic legal scholars in Central Asia.

At the same time, attention is directed towards the steady revival of Islamic ideas in all the countries of Central Asia. Islamic values are being adopted more and more among younger members of the elite classes who are active in bureaucratic and economic circles. Even Kazakhstan and Kyrgyz Republic, where Islamic influence has been historically weak, are no exceptions to this trend. Fasting and restraint of alcohol consumption are quietly becoming more widespread. However, it should also be recognized that such developments will not immediately lead to the emergence of extreme radicalism. It is frequently argued that the emergence of radical Islamic groups can be directly linked to economic factors such as poverty and unemployment and that the key to resolving radicalism lies in overcoming these economic problems. Although this argument is not wholly mistaken, the fact that the Islamic renaissance is also appealing to wealthy and elite groups suggests that the issue is not so straightforward. The trend of Islamic renaissance in Central Asia may be linked to a desire among these countries to find a way of life and identity following the disappearance of official ideology in line with collapse of the Soviet Union. In this sense, in addition to working on the resolution of socioeconomic problems such as poverty, it is particularly important to encourage mutual understanding through promoting dialogue between civilizations and religions.

There are two main streams among the numerous strands of anti-government Islamist political movements in Central Asia. First is the radical faction typified by the Islamic Movement of Uzbekistan (IMU), which developed out of the Fergana Valley and forged close links with al-Qaeda and the Taliban in Afghanistan. However, due to the demise of leaders such as Juma Namangani and government repression, the IMU has been undermined in Central Asia, and minor offshoots are seen to be conducting activities with al-Qaeda in the Federally Administered Tribal Areas (FATA) of Pakistan.

Another stream is the Islamic Liberation Party (Hizb-al-Takhrir-al-Islamia), which is now attracting the greatest vigilance by governments, most notably Uzbekistan. This movement, which originated in Palestine in the 1940s, entered Central Asia at the end of the 1990s and has been growing increasingly active ever since. The Islamic Liberation Party is calling for restoration of a unitary Islamic state or caliphate (the caliphate of early Islam or the Osman dynasty), and it is gaining support through a campaign of propaganda and persuasion with a view to achieving its ultimate goals. Calls for a caliphate are underpinned by the desire to establish a Turkistan state in denial of the existing state. Although the Islamic Liberation Party disavows itself from violence, governments, especially the Government of Uzbekistan, are coming down hard on members and supporters and view it as the greatest anti-government organization. In Tajikistan, the officially recognized Islamic Renaissance Party is a rival of the Islamic Liberation Party. Kyrgyz Republic and Kazakhstan are also wary of the Islamic Liberation Party, however, the situation is largely unclear in Turkmenistan. The Islamic Liberation Party is also extending its influence to the Xinjiang Uyghur Autonomous Region of China, and the Chinese authorities are also monitoring its activities. The U.S. State Department did not consider the Islamic Liberation Party to be an international terrorist organization because of its non-violent stance until 2005, however, it has since altered its attitude.

Table 1-7 Main Islamic Restoration Movements in Central Asia

| Organization | Outline |
| :--- | :--- |
| $\begin{array}{l}\text { Islamic Liberation Party } \\ \text { (Hizb-al-Takhrir-al-Islamia) }\end{array}$ | $\begin{array}{l}\text { This Islamic movement is currently attracting the deepest concern from } \\ \text { governments in Central Asia. It is a totally clandestine organization. It } \\ \text { currently conducts propaganda and education activities with a view to } \\ \text { winning support from large numbers of Muslims. It disavows the use of } \\ \text { violence. In the long run, it aims to establish a caliphate Islamic state. It } \\ \text { clearly defines itself as a political party. It was founded in 1949 by } \\ \text { Tqiuddin al-Nabhani, who was born in Haifa (present Israel) in 1909. It } \\ \text { aims for the establishment of an Islamic state and the liberation of } \\ \text { Jerusalem, and it call for restoration of a caliphate. It has been declared } \\ \text { an illegal organization in almost all parts of the Middle East and Arab } \\ \text { world. It has branches in Syria, Iraq, Lebanon and Turkey, and it also has } \\ \text { a base in Indonesia, etc. Its ideology is founded on Salafi (return to early }\end{array}$ |
| Islam) crossing over ethnic groups and states. Unlike groups such as the |  |
| Tajikistan Islamic Renaissance Party and so on that are approved within |  |
| certain state boundaries, the Hizb-al-Takhrir-al-Islamia purports |  |
| Pan-Islamism. |  |
| $\begin{array}{l}\text { Hizb-al-Takhrir-al-Islamia is seen to have entered Central Asia around the }\end{array}$ |  |
| end of the 1990s. Here, it initially seeks the liberation of Turkestan. It is |  |
| regarded as an unlawful organization in Central Asia. |  |
| The feature of its activities in Central Asia is said to be an emphasis on |  |
| social equity and targeting of people who feel nostalgia for the social |  |
| security and pensions, etc. of the Soviet era (red mosques). |  |
| The number of members is unknown. It is said that half the |  |
| anti-government activists who have been arrested in Uzbekistan are |  |
| connected with the Islamic Liberation Party. |  |
| It is expanding its operations in Uzbekistan and Tajikistan especially, and |  |$\}$


| Organization | Outline |
| :--- | :--- |
|  | Its leaders are Tohir Yo'ldosh and Juma Namangani. The latter is said to <br> have been killed in American bombing of Afghanistan in October 2001. <br> The group relocated to Tajikistan and Afghanistan at the end of the 1990s. <br> It seized four Japanese engineers in Batken in the south of Kyrgyz Republic <br> in August 1999 and made incursions into southern Uzbekistan in 2008. Its <br> deepened its links with the Taliban in Afghanistan from the end of the <br> 1990s. It is also connected to al-Qaeda. Members of the IMU or Uzbek <br> nationals who were influenced by them are thought to be currently acting in <br> concert with al-Qaeda in Afghanistan and Pakistan. |

Source: Prepared by the Study Team

## - Social Development Situation

Looking at conditions of social development based on the human development index, each of the five Central Asian countries is classed as a middle developed nation. Average life expectancy at birth is around 65 years, however, as of 2003 life expectancy had deteriorated compared to the situation before independence. Looking at public expenditure in the health sector in 1995 and 2002, the amount had declined in all countries except for Turkmenistan.

Table 1-8 Human Development in Central Asian Countries (2005)

| Country | HDI <br> Ranking | HDI | Average Life <br> Expectancy at Birth <br> (years) | Adult Literacy <br> (\%, 15 and over) | Combined Attendance <br> Rate in Elementary, <br> Secondary and <br> Higher Education (\%) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Kazakhstan | 73 | 0.794 | 65.9 | 99.5 | 93.8 |
| Turkmenistan | 109 | 0.713 | 62.6 | 98.8 | - |
| Uzbekistan | 113 | 0.702 | 66.8 | - | 73.8 |
| Kyrgyz <br> Republic | 116 | 0.696 | 65.6 | 98.7 | 77.7 |
| Tajikistan | 122 | 0.673 | 66.3 | 99.5 | 70.8 |

Source: Prepared from the United Nations Development Programme, "Human Development Report 2007/2008"


Source: UNDP, "Central Asia Human Development Report", (2005), p.145, Figure6.3
Figure 1-2 Decline in Average Life Expectancy at Birth (full year in 1990 and 2003)


Source: UNDP, "Central Asia Human Development Report", (2005), p.144, Figure 6.1
Figure 1-3 Public Spending on Health as \% of GDP (1995 and 2002)

As a result of the dissemination of education during the Soviet era, the adult literacy rate in 2005 was still standing at almost $100 \%$. On the other hand, looking at attendance rates in secondary education between 1989 and 2002, the situation deteriorated in all the countries between the declaration of independence and the mid-1990s. The situation deteriorated drastically in Tajikistan during the civil war and, although it showed signs of improvement for a while, it worsened again after 2000.

Uzbekistan has also witnessed a decline in the years following independence. In Kazakhstan, Kyrgyz Republic and Turkmenistan, the situation worsened until the middle of the 1990s, displayed signs of recovery after that, deteriorated again following the economic crisis at the end of the 1990s, and finally displayed a trend of recovery from around 2000 . It will be necessary to monitor conditions from now on in order to see what kind of effect is exerted by the global economic crisis that began in the fall of 2008.


Source: UNDP, "Central Asia Human Development Report", (2005), p. 150
Figure 1-4 Gross Enrollment Rates at General Secondary Education (\% of the population aged $15 \sim 18$ )

All the Central Asian republics are confronted with crises in their education systems, and these can be summarized into three interconnected problems, i.e. a. Crisis of elementary and secondary education, $b$. Crisis of higher education, and c. Increasingly large language barriers.

Table 1-9 Issues and Current Conditions in Education Systems in Central Asia

| Issues | Conditions Triggered by the Issues |
| :--- | :--- |
| 1. Elementary and secondary education | - Decline in the literacy level, especially among |
| - Breakdown of the infant education system living in poverty in rural areas |  |
| - Weakening of vocational training and technical |  |
| secondary education | - Discriminatory customs against women are |
| - Dramatic fall in public investment to the |  |
| education sector | returning, and secondary education attendance is <br> falling among girls. |
| - Increasing numbers of street children and other |  |
| children at risk |  |

Source: UNDP, "Central Asia Human Development Report", (2005)

Moreover, there appears to be a growing gap between economic needs and education systems in Central Asia. Even though universities strive to address social and economic needs, students are unwilling to respond due to distortions in the market economic system. For example, Naryn Province in Kyrgyz Republic is one of the foremost livestock farming regions, however, the department of veterinary science that was recently opened at the University of Naryn, which was established after the declaration of independence, cannot attract any students at all. Even though infectious diseases occurring in sheep or horses can have grave economic consequences and there is a high demand for veterinary medical services, the low payment ability of farmers means that veterinary surgeons cannot make a living out of such work. A common problem in Central Asia is that many students at agricultural technical colleges hold few expectations regarding agriculture as an industry.


Source: UNDP, "Central Asia Human Development Report", (2005), p.151, Figure 6.7
Figure 1-5 Gross Enrollment Rates at Vocational Training Schools and Technical Secondary Schools in Central Asia (\% of the population aged 15~18)

Narcotics from Afghanistan are transported along three main routes. The first extends from the northeast of Afghanistan, through Tajikistan and into Russia; the second starts from the northeast of Afghanistan, enters Pakistan and goes through ports in Pakistan; and the third goes westwards through the desert and enters Iran. Both Iran and Pakistan are working on bolstering border controls, so narcotics organizations are coming to use the route passing through Central Asia. All five countries of Central Asia are transit points for narcotics smuggling routes, and there is a pressing need to bolster border controls, strengthen law enforcement and eradicate associated corruption.

## 1-2.2 Turkmenistan <br> - Development of National Identity

Turkmenistan has also encouraged Turkmen nationalism, and this is best exemplified in the Ruhnama (The Book of the Soul), which was written by former President Niyazov and is revered as a holy work on the subject of Turkmen nationalism. This work also criticizes Communism and the Soviet era and includes the memoirs of Niyazov. In Ashgabat, a building modeled on the Ruhnama is regarded as a monument, while the Ruhnama is included as a compulsory subject in education and entrance examinations from elementary schools to universities. When the Turkmenistan army marches, the soldier at the front leads the troops while holding the Ruhnama aloft. This book has also been translated into more than 30 other languages including Japanese. President Niyazov penned it in the later years of his life, with the first edition being published in 2001 and the second edition being published in 2004. The Ruhnama has been criticized for distorting history by other Central Asian countries, most notably Uzbekistan. It will be interesting to see how the new President Berdymukhamedov will treat the Ruhnama, however, the target of personal cult has now shifted to the new president and it is possible that the national identity will be undergo further change from now on.

## 1-2.3 Kyrgyz Republic <br> - Islamic Renaissance

Islamism was carried to Kyrgyzstan around the $19^{\text {th }}$ century and has a more recent history here than in Uzbekistan and Tajikistan. However, signs pointing to a renaissance of Islamism can also be seen in the Kyrgyz Republic following the declaration of independence. The Kyrgyz parliament passed a bill banning the use of veils by women in March 2009, however, a petition opposing this decision was signed by 50,000 citizens and succeeded in preventing the law being executed. This was indicative of the silent spread of Islamic renaissance.

## 1-2.4 Tajikistan <br> - Islamic Renaissance and Nationalism

Tajikistan has traditionally been subject to a strong Islamic influence. Around the beginning of the 1920s, the Basmati movement adopted guerrilla tactics to resist the Bolshevik government. In Tajikistan too, the tide of nationalism including Islamic renaissance is silently making progress. Islamic renaissance and nationalism are not always compatible and frequently are at odds, however, in Tajikistan the two streams are advancing together. President Rahmonov removed the Russian ending "ov" from his name and chose the new name of Rahmon at the end of 2007. While many of the Central Asian leaders retain their Russian names, this move was a symbolic gesture. Moreover, the Tajikistan parliament passed a resolution in 2009 decreeing that the Hanafi branch of Sunna is the orthodox school of Islamism in the country. Although it appears the Islamic Renaissance Party has lost some of its political clout following the end of the civil war in 1997, there has recently been a growing trend towards Islamism within the ruling People's Democratic Party of Tajikistan. There are some voices that point to similarities with the Islamic renaissance movement currently afoot in Turkey.

## 1-3 Transitions and Current Conditions in International Relations

## 1-3.1 Central Asia Region

## - International Relations surrounding Central Asia in Recent Years

Russia has historically had the deepest strategic interest in Central Asia. It is most worried about the possibility of specific external forces, most notably the United States, strengthening their influence in the region. On the other hand, the United States is interested in extending its influence here in order to augment its global strategy. China's interests lie in, 1) developing Central Asia as a supply base for petroleum and gas resources and ferric, non-ferric and rare metals, 2) developing overland transportation routes, and 3) preventing the region from becoming a base for activities by Uyghur separatists.

Iran is striving to extend its influence in Central Asia through Tajikistan, with which it has profound cultural links, while taking care not to arouse religious sensitivities in the region. As is evidenced by its observer participation in the Shanghai Cooperation Organization (SCO), one aspect of Iranian policy in Central Asia is to avoid falling into international isolation.

Relations with Pakistan and India are also having an impact on Central Asia and Afghanistan. Pakistan, like Afghanistan, viewed the independence of Central Asian countries as an opportunity to build strategic depth in its rivalry with India. In this respect, Pakistan has strived to make overtures to the Central Asian republics through emphasizing its religious and
cultural similarities as a Muslim state. Central Asia also represents an attractive supply base of gas and petroleum resources. However, due to their ingrained secular traditions, the Central Asian countries hold a stronger affinity towards India and are wary of Pakistan after seeing how it supported the Taliban. As a result, Pakistan's efforts to approach the Central Asian republics have not produced the anticipated results. In the wake of the $9 / 11$ terrorist attacks and the inauguration of the new government in Afghanistan, Pakistan has been alarmed by the opening of Indian consulates in the Afghan cities of Herat, Kandahar and Jalalabad and the granting of permission by Tajikistan to India to operate an air force base on its territory, and it has issued warnings and expressed its concern on numerous occasions.

Central Asia is assuming increasingly special importance in relation to the Afghanistan issue following the start of the Obama administration in the United States in January 2009. Whereas the previous Bush administration emphasized Iraq in its war on terror, the Obama administration has announced that it will shift the focus of its counter-terrorism strategy to Afghanistan. The U.S. Army has already sent an additional 20,000 troops to Afghanistan and is restructuring its strategy against the Taliban and al-Qaeda. However, the sphere of activity of the Taliban and al-Qaeda has extended from Afghanistan to the FATA and North-West Frontier Province of Pakistan in the past year or two, and this is generating a new set of problems. Due to the shift of operations by the Taliban and al-Qaeda, conditions have been destabilized in the Khyber Pass linking Pakistan to Afghanistan and along the NATO and U.S. military supply and transportation route linking Quetta in Balochistan to Kandahar in Afghanistan. As a result, Central Asia has become increasingly important from the geopolitical viewpoint as an alternative route for transporting military and non-military supplies in order to complement the Pakistan route. Needless to say, Tajikistan, Uzbekistan and Turkmenistan are important because they share borders with the northern part of Afghanistan, however, attention is also being directed towards the need for cooperation with Kyrgyz Republic, Kazakhstan and Russia. The war on terrorism in Afghanistan has made it necessary to balance relations between the United States, Central Asia and Russia. Russia is trying to extract as many diplomatic concessions as possible regarding geopolitical advantage and influence on Central Asia in return for cooperation from the United States and NATO.

The Taliban issue has gone beyond the borders of Afghanistan and has developed into an Afghanistan-Pakistan problem (AFPAK). The Taliban and al-Qaeda have established operations in the FATA in Pakistan, and they have also expanded activities to the Swat Valley in the north of Pakistan in 2009. The Government of Pakistan sought to appease the Taliban by permitting the adoption of Islamic law in that region, however, it has subsequently launched a full-scale military offensive. This has provoked retaliatory terrorist attacks in Lahore in Punjab Province, thereby extending the theater of conflict to the heart of Pakistan. Moreover, the cleanup operation by the Pakistan military in the Swat Valley is generating large numbers of refugees, meaning that the Afghan problem has become a problem for Pakistan too. Since the Taliban and al-Qaeda also include natives of Central Asia in their ranks, the situation in Pakistan has the potential to trigger political destabilization in this area too.

Furthermore, the worldwide financial and economic crisis that started in 2008 is hitting the Central Asian republics hard. The impact of falling oil prices on Russia and Kazakhstan is not only hurting their economies but is also affecting Tajikistan, Kyrgyz Republic and Uzbekistan, making it necessary to take emergency response measures. Meanwhile, Russia views the economic crisis as an opportunity to expand influence in the Central Asian republics and is striving to deepen its involvement in the region through economic assistance and so on. Moreover, clashes of interest between Central Asian countries over water and energy resources have intensified in recent years, and their ability to overcome the economic crisis and find new development strategies based on regional cooperation will be tested from now on.

## - Increasingly Serious Water and Electricity Problems

The question of how to distribute water resources is an increasingly serious issue in Central Asia. This region is divided into the countries that possess water resources, most notably the Amu Darya and Syr Darya Rivers, i.e. Tajikistan and Kyrgyz Republic, and the countries that are situated in downstream areas, i.e. Uzbekistan, Kazakhstan and Turkmenistan.

The downstream nations which are unable to rely on rainwater have traditionally conducted agriculture dependent on water from the Amu Darya and Syr Darya and canals branching out from them. During the Soviet era, conditions in both rivers could be controlled from Moscow, however, following the declaration of independence by each republic, the rivers became international waterways and the conflicting interests of each country became apparent. Most notable is the conflict between the downstream nations and Tajikistan and Kyrgyz Republic, which possess almost all the headwaters of Central Asia's major rivers.

During the Soviet era, the upstream nations stored water from both these rivers during the winter, while their energy and electricity requirements at this time were satisfied by gas and electricity supplies from the downstream countries. Thanks to this region-wide adjustment system, water was supplied when needed in spring, and the downstream countries conducted agricultural activities using this. Now, however, the upstream nations are unable to pay for natural gas supply due to foreign currency shortages; in response, the downstream nations suspend the supply of gas, and this forces the upstream nations to overcome power shortages by releasing the water to generate hydropower in the winter months. As a result, the amount of water flowing downstream in the spring increases, and this has an impact on agricultural production in the downstream nations. Following the harsh winters of 2007 and 2008, the amount of water contained in dams in Tajikistan and Kyrgyz Republic decreased, and the above scenario is becoming a reality. Combined with the growing seriousness of power shortages in the upstream countries, the issues of water and energy/electricity are coming to define international relations between the countries of Central Asia.

In such circumstances, Russian overtures to cooperate in hydropower development in the upstream countries are causing alarm among the downstream nations because this means that water use rights will be further controlled by the upstream countries and Russia. Put another way, Russia appreciates the strategic importance of water resources and is utilizing aid to upstream nations as a means of reestablishing its influence in Central Asia. If Afghanistan comes to use more water from the Amu Darya in future, water conflicts will grow even more intense between the downstream countries, and the strategic significance of water resources will be further heightened.


Source: UNDP, "Central Asia Human Development Report", (2005), p84, Figure4.1
Figure 1-6 Water Resources Management in Central Asia


Source: UNDP, "Central Asia Human Development Report", (2005), p88, Figure4.2
Figure 1-7 Major Water Sources and Hydropower Facilities in the Syr Darya Basin

In October 2008, at the proposal of Kazakhstan, the five countries of Central Asia reached agreement on an energy and water supply convention. Under this, the three countries blessed with energy resources (Kazakhstan, Turkmenistan and Uzbekistan) will supply energy to the two countries not blessed with energy resources (Tajikistan and Kyrgyz Republic) in return for the provision of stable water supply. Within this framework, it is stipulated that Turkmenistan will sell electricity to Kyrgyz Republic and Tajikistan via Uzbekistan. It is scheduled for Turkmenistan to supply 1.2 billion kWh to Tajikistan by 2012. This is the first time such a convention has been signed since the collapse of the Soviet Union, however, its feasibility is questionable. Turkmenistan suspended the supply of electricity to Tajikistan in January 2009 because the governments of Uzbekistan and Tajikistan were unable to reach agreement on charges for using the power transmission line from Turkmenistan passing through Uzbekistan.

## - Constraints of Landlocked Countries

When considering international relations in Central Asia, it should be remembered that all the countries are landlocked and view the securing of transport routes to the sea as a vital issue. In particular, Uzbekistan is a double landlocked country in that all the countries that border it are also landlocked.
Trade routes primarily pass through Russia, following the routes established during the Soviet era, however, the challenge facing the Central Asian countries now concerns how to diversify trade routes. One of the problems confronting the Korean carmaker Daewoo when it established a car assembly plant in a joint venture with the Government of Uzbekistan has been the need to secure a route for transporting parts from South Korea, and it has considered the Siberian rail route, a route through China and Kazakhstan, and a route through Iran and so on.

In addition to the economic demerits, in the event where the Central Asian republics cannot anticipate stable and friendly relations with neighboring countries, since landlocked constrictions will exasperate problems, the need to develop alternative transportation routes is a pressing issue.

For example, Tashkent in Uzbekistan and Dushanbe in Tajikistan are the only capitals in Central Asia not to possess an air connection, thereby indicating the poor state of relations between these two countries. Accordingly, Tajikistan is unable to utilize routes going through Uzbekistan, and rather needs to develop the southern route leading to the Arabian Sea.

A potential option is the route through Afghanistan. The U.S. engineering corps built a bridge over the Panj River, which is a tributary of the Amu Darya, in 2007, and this has paved the way for a useful route once the political situation in Afghanistan has settled down.

Another potential route is the one passing through China to Pakistan. The route passing through the Xinjiang Uyghur Autonomous Region of China, entering the Karakoram Highway in Pakistan and leading to Karachi Port is another option. China is currently conducting works on widening the Karakoram Highway and has committed a lot of funding and technology to the dredging and expansion of Gwadar Port situated almost halfway between Karachi and the Iranian border. Gwadar is also a military port, however, the Government of Pakistan, within its policy to develop Balochistan Province, aims to develop Gwadar as a tourism center and trade port to complement Karachi, and these plans also conform with China's desire to secure a transportation route. Although China has not publicly stated so, in the event where trouble arises on the oil transport route from the Persian Gulf, it would like to secure an alternative supply route through Pakistan based on landing at Gwadar Port.

## 1-3.2 Relations between Central Asia and Afghanistan

Central Asia has historically had a profound relationship with Afghanistan. Russia commanded the area now known as Central Asia up until the end of the $19^{\text {th }}$ century; however, prior to that Central Asia including the Khanates of Kokand, Bukhara and Khiva and Afghanistan was a single world of thriving mutual exchange. The political and economic structures of Central Asia and Afghanistan only drifted apart following the Russian Revolution in 1917. However, the northern part of Afghanistan is known as South Turkistan and, together with West Turkistan in the present Central Asia and East Turkistan which forms the present Xinjiang Uyghur Autonomous Region of China, this whole region constitutes Turkistan in the broad sense and still retains strong cultural and ethnic commonality.

The primary ethnic group in Afghanistan is the Pashtuns accounting for around half of the population, however, Tajiks form the second largest ethnic group. Other ethnic minorities include Hazara, Uzbeks and Turkmen. The Tajiks, Uzbeks and Turkmen living in Afghanistan belong to the same ethnic groups as people in the Central Asian republics that border the country. Although the Tajiks, Uzbeks and Turkmen living in Afghanistan are not campaigning for integration with their compatriots in the countries to the north of Afghanistan, the birth of independent states sharing the same ethnic roots has certainly raised their nationalist awareness.

During the Soviet invasion of Afghanistan (1980-1989), mujahedeen (Islamic guerrilla jihad fighters) forces comprising different ethnic groups autonomously fought against the Soviet forces, and this encouraged minority ethnic groups to assert their own claims more forcefully. These demands came to be reflected in the Constitution of Afghanistan that was enacted in January 2004. In addition to the majority Pashtuns and Tajiks, the new Constitution gave official recognition to 14 ethnic groups including Uzbeks and Turkmen. Moreover, the Turkic languages of Uzbek and Turkmen were recognized as third official languages in respective ethnic regions together with the conventional official languages of Pashto and Dari (Persian).

Uzbekistan is separated from Afghanistan by the Amu Darya River, and it currently conducts trade through the border town of Termez ${ }^{6}$. After Uzbekistan gained independence at the end of 1991, it has been wary of the effects of developments in Afghanistan ever since Soviet troops withdrew from there. In the civil conflict that engulfed Afghanistan from 1992, the militia led by the secular Uzbek warlord Abdul Rashid Dostum assumed de facto control over the area around Mazari Sharif in the north, and Uzbekistan attempted to meddle in Afghanistan domestic politics through utilizing Dostum as a pipe to confront religious factions. Although the Uzbekistan government has never officially admitted to having relations with General Dostum, he made frequent visits to Tashkent and certainly operated within a diverse network of human connections.

## Box 1-4 Uzbekistan

Uzbekistan has a population of approximately 26 million, accounting for roughly half the combined population of Central Asia and, since it shares borders with all the other Central Asian republics, it exerts a major geopolitical influence in the region. Whereas Kazakhstan has become the wealthiest and largest economic power in the area, Uzbekistan has become the main political force in the region.

Uzbek minorities can be found in all the countries of Central Asia, most notably in

[^35]Tajikistan and Kyrgyz Republic, where the Uzbek presence is strongly felt. In Tajikistan, Uzbeks account for the majority in the economically advanced Fergana Valley. Meanwhile, in Kyrgyz Republic, there is a high proportion of Uzbeks in the south, especially the second city of Osh, where ethnic clashes resulted in more than 100 fatalities in 1990. Furthermore, predominantly Uzbek residential areas in the south of Kyrgyz Republic including Batken Province represent a stumbling block to national unification in that country. The countries of Central Asia tacitly feel Uzbekistan is trying to apply pressure within their borders.

Relations concerning identity between Uzbekistan and ethnic Uzbeks in foreign countries are complicated by current conditions and historical events and cannot be easily reconciled. However, as could be seen during the civil war in Afghanistan, when Uzbekistan and the military faction led by the Uzbek leader Dostum utilized each other, mutual relations can be developed in certain circumstances. At the same time, it is a fact that Uzbeks in Afghanistan have no desire to become unified with Uzbekistan. Attention should also be drawn to the fact that surrounding Central Asian countries are wary of radical Islamic movements infiltrating their borders via networks of Uzbek groups. Furthermore, due to historical differences over territory and disparities in the approach to Islamic movements, there is a particularly deep-seated mistrust between Uzbekistan and Tajikistan.

Another feature of Uzbekistan can be seen in its wildly oscillating diplomatic relations with Russia and the United States, as opposed to the other Central Asian republics which basically seek to follow a more balanced omnidirectional approach. This is a major cause of upheaval in Central Asia. Uzbekistan took part in the formation of the CIS Collective Security Treaty Organization (CSTO) in May 1992, however, it seceded from it in April 1999. Following the $9 / 11$ terrorist attacks, Uzbekistan approached the United States and allowed allied forces to use Khanabad air base; however, when the United States criticized Uzbekistan over its handling of the Andijon incident of May 2005, Uzbekistan retaliated by demanding the withdrawal of American forces, and this was completed by November. After that, Uzbekistan made overtures to Russia and effectively sought its security cooperation by returning to the CSTO in August 2006. Also, it prohibited activities by American NGOs and banished them from its borders. However, towards the latter part of 2008, there are once again signs that Uzbekistan wants to distance itself from Russia and improve relations with the United States and Europe. This is linked to the fact that the geopolitical importance of Uzbekistan in relation to the Afghanistan strategy is being revalidated, and the United States has started making moves to improve relations. Russia, too, is eager to retain cordial relations with Uzbekistan, as may be gathered from the sudden visit of Prime Minister Putin to Tashkent immediately after the conflict between Russia and Georgina in the middle of August 2008 and the visit by President Medvedev in January 2009.

## - Direction of Regional Cooperation towards Afghanistan

As is indicated above, the Central Asian countries have developed historically, ethnically and geographically profound relations with Afghanistan, and they are maybe best positioned to contribute to the social and economic stabilization of Afghanistan. However, looking at the current condition of the Central Asian countries, even though 18 years have passed since the declaration of independence, apart from Kazakhstan and Turkmenistan, which are blessed with petroleum and gas reserves, the other countries do not possess the financial strength to actively
support Afghanistan. Moreover, the recent contraction in global financial markets is causing Kazakhstan and Russia to release emigrant workers, thereby resulting in a decline in remittances sent to the other Central Asian countries. Against this background, it is unclear how regional cooperation towards Afghanistan will develop in future.

In view of these circumstances, based on the assumption that Afghanistan recovers political stability, it will be necessary to consider the following points when considering Japanese assistance from Central Asia to Afghanistan.

The first point concerns relationships between Afghanistan and regional cooperation organizations in Central Asia. Out of these organizations, Afghanistan belongs to the Economic Cooperation Organization (ECO) and the Central Asia Regional Economic Cooperation (CAREC). President Karzai of Afghanistan attended the $10^{\text {th }}$ summit of the ECO in March 2009, and past summit meetings also addressed this issue by establishing a special support fund to support the reconstruction of Afghanistan and so on. However, it is may be more realistic to make use of CAREC, which has the structure to implement actual regional cooperation. As is mentioned later on, since CAREC is active in the transport sector, energy sector, trade policy and trade promotion fields and it has already implemented concrete projects, it may be realistic to consider wide area Japanese assistance within this framework. In particular, Japan has so far conducted numerous aid projects in the transport sector in Central Asia, and this is an area where it can cooperate via concrete undertakings. As road and rail network connections within the region become more advanced, not only will this promote trade, but it also has the potential to exasperate the problem of narcotics smuggling, etc. Accordingly, an effective measure may be to implement border control training, which has been conducted in the past, in tandem with CAREC cooperation. The OSCE plays a major role in border controls between Central Asia and Afghanistan, and since Japan has offered border control assistance via the OSCE in the past, it may be effective to cooperate with other experienced donors and regional organizations when examining support for Afghanistan via Central Asia in the future.

Another possibility is to offer support via Tajikistan, which possesses the longest border with Afghanistan out of the Central Asian republics and also has strong ethnic links. Tajikistan currently provides assistance to Afghanistan in the health sector and via training, etc., and it may be possible to support Tajikistan assistance for Afghanistan through conducting third country training or south-south cooperation.

## Box 1-5 Tajikistan Policy vis-a-vis Afghanistan

The independent state of Tajikistan and Afghanistan commenced diplomatic relations in July 1992. For both countries, border stability is the most important issue, however, they also discuss relations concerning commerce, science and technology and culture and have so far signed 43 protocol agreements. However, all of these are related to economic affairs; and moreover, not all of the agreements have been implemented.

In geographical terms, Tajikistan is connected to Afghanistan by five bridges. Also, three border markets are in operation, while plans are being considered to open another two. In August 2007, U.S. Armey engineers constructed a friendship bridge over the border with Afghanistan. During the first six months of 2008, 4,400 vehicles and 130,000 tons of freight crossed from Tajikistan into Afghanistan, while 2,200 vehicles and 81,000 tons of freight went the other way.

Currently, work is being advanced on construction of a transmission line connecting Tajikistan to Pakistan via Afghanistan and infrastructure for supplying electricity from

Kyrgyz Republic via Tajikistan, and these projects are being implemented within the framework of the Central Asia/South Asia Regional Electricity Market (CASAREM) ${ }^{7}$ under support from international financial agencies such as the ADB, EBRD, WB and Islam Development Bank (IsDB). Plans are also under consideration regarding the projects for the training of Afghan experts in Tajikistan, hydropower development and irrigation in Afghanistan ( 1.5 million hectares). Training of Afghan experts in Tajikistan is conducted at Tajik universities and covers all fields including the electric power sector, transport sector and health and sanitation sector, etc. Tajikistan also conducts military training. Also, a Chinese company has won the tender for a project to build a road connecting Afghanistan, Tajikistan and China. A Chinese mineral resources prospecting company is currently active on the outskirts of Kabul, and there are plans to build a road from here to China.

Considering that it shares a border stretching 140 km , Tajikistan is very interested in maintaining good relations with Afghanistan. Tajikistan, which recently underwent civil war and reconciliation within its own borders, believes it can convey its experience of ethnic peacemaking to Afghanistan. Since the stabilization of Afghanistan will open up access to Mumbai, this is an extremely important issue for the economic development of Tajikistan.

## 1-3.3 Turkmenistan

## - Neutral State - Turkmenistan

Turkmenistan declared itself a neutral country and was recognized as a permanently neutral state by the United Nations in 1995, and since then it has pursued a unique diplomatic policy based on neutrality. "Neutrality" is constantly emphasized in government publications and Turkmenistan often avoids following suit with joint political and economic actions by the other four Central Asian countries, instead preferring to adopt an inward looking and independent approach.

Turkmenistan has avoided participation in both the Central Asia Cooperation Organization (CACO) and the Collective Security Treaty Organization of the Commonwealth of Independent States (CIS). Neither does it participate in the Eurasian Economic Community (EAEC), which was formed when Russia absorbed and integrated with the CACO. Its participation in the CIS was changed from full membership to associate membership in August 2005.

Turkmenistan's decision to pursue neutrality reflects its desire to avoid external interference in internal affairs and to avoid being caught up in U.S.-Russian wrangling as well as a belief that it is more advantageous to maintain a free hand in diplomacy. The capital city, Ashgabat, is situated in the foothills of the Kopet Dag Range, which forms the border with Iran, and it is not far from Mashhad, which is the primary city in the Iranian province of Khorasan. Turkmenistan has a long history of cultural and religious exchange with Iran, however, due to the effects of the Soviet policy purporting separation of religion from politics and the fact that Shi'a Muslims are in the minority, Turkmenistan was not greatly affected by the Iranian Revolution and is not susceptible to the so-called Iranian threat. At the same time, it is very wary not to be drawn into any unnecessary conflicts by letting its territory be used by the United States to launch attacks against Iran, and this partly explains the calm nature of its relations with Iran.

[^36]Turkmenistan's unique diplomatic stance is also reflected in its approach to Afghanistan. Unlike the other two countries of Central Asia (Tajikistan and Uzbekistan) that share borders with Afghanistan, Turkmenistan cultivated friendly relations with the Taliban administration. Between the Taliban's conquest of Kabul in 1996 and its downfall in 2001, Turkmenistan sought common interests with the Taliban and succeeded in neutralizing the Taliban threat. While maintaining official diplomatic relations with the Northern Alliance, Turkmenistan at the same time allowed the Taliban to establish a permanent mission in Ashgabat, thereby skillfully sustaining a diplomatic balance. Due in part to the fact that Turkmen minorities in Afghanistan didn't organize effective militias, Turkmenistan's border with Afghanistan remained generally peaceful.

Turkmenistan initially viewed the natural gas pipeline proposed by the American enterprise Unocal Corporation through Afghanistan to Pakistan (and India) as a promising alternative route to the route through Russia, and the cooperation of the Taliban was viewed as essential for this. The Taliban could ensure the political stability of the southeast route and benefit from transit charges from the pipeline. It was around this time that the United States State Department invited Taliban leaders to America for talks. Subsequently, U.S. ties with the Taliban deteriorated suddenly as the Taliban become involved with al-Qaeda, and the pipeline project was not realized. The new administration in Afghanistan has reached an agreement with Turkmenistan and Pakistan with a view to realizing this project, however, the possibility of this happening has again been postponed by instability arising from a renewed upsurge in Taliban activity in the southeast of Afghanistan.

## - Tough Negotiation related to Gas Export

The most important issue in Turkmenistan's diplomacy affairs is the setting of prices for exported gas. It does not disclose its price system, although it is believed to be a complicated process that even considers political and strategic relations with Russia. Almost all pipeline exports of gas from Turkmenistan are currently conducted through Russia, although the pipeline connecting Karabcheh to Korkui exports gas to northern Iran. In any case, pricing tends to become a topic of heated debate between the parties concerned. On March 11, 2008, the Russian enterprise Gazprom announced that from January 2009 it would pay European market prices for gas purchased from Turkmenistan, Uzbekistan and Kazakhstan in Central Asia. This announcement, indicating that Central Asian pressure had to some extent been accepted, means that the price of gas will be raised from US $\$ 180$ per $1,000 \mathrm{~m}^{3}$ to US $\$ 200-300$ per $1,000 \mathrm{~m}^{38}$. Russia does not possess sufficient production capacity to fulfill its numerous commitments to export gas, and this decision indicates the growing importance of Turkmenistan gas to Russia. The greatest burden arising from this decision is being placed on Ukraine. Iran initially resisted a similar hike in the price of gas imports from Turkmenistan, however, it finally accepted the new prices in the middle of April ${ }^{9}$.

Turkmenistan's relations with Russia have become strained in 2009. President Berdymukhamedov visited Russia and held talks with President Medvedev in March, however, a number of scheduled protocol agreements were not signed at this time. Then, the explosion and destruction of the Centor gas pipeline connecting Turkmenistan to Russia on April 9 further strained relations. Concerning this, the Director of the Russian Science Academy Petroleum and Gas Issues Research Institute commented that the pipeline had been constructed from the end of the 1960s to the 1970s and there were problems in its maintenance. However, the Turkmenistan Ministry of Foreign Affairs criticized the director, claiming that the unauthorized

[^37]limiting of gas intake by Gazprom Export, the Turkmenistan affiliate of Gazprom, led to sudden fluctuations in the gas flow and this caused the pipeline to burst. The President of Turkmenistan criticized the Gazprom side, while at the same time announcing plans to consign investigation into the cause of the accident to an international study team. Although Gazprom agreed to purchase gas at "prices on a par with Europe," the price now has declined, demand has dropped and a surplus situation has been created ${ }^{10}$.

Another feature of Turkmenistan's gas diplomacy is a plan to export gas to China by pipeline. This is a grand scheme covering $10,000 \mathrm{~km}$ and supplying 300 billion $\mathrm{m}^{3}$ of gas over 30 years through Uzbekistan and Kazakhstan to the center, east and south of China. Turkmenistan reached a basic agreement to sell natural gas to China in July 2006, and the governments of both countries officially signed this in 2007. At the same time, construction work in Turkmenistan was started by Strytransgaz, a subsidiary of Gazprom. The start of works was also conveyed to Uzbekistan and Kazakhstan in the middle of 2008. The work was scheduled to start in 2009, however, it now appears that this will be subject to major delay. The work is expected to be postponed by at least two years. The delay is connected to the slow progress of the work so far and the fact that price negotiations for gas are making little headway against the recent backdrop of falling oil prices.


Source: Japan Oil, Gas and Metals National Corporation, "Conditions Surrounding Gas Supply Problems in Ukraine: relations with Central Asia and Pipeline Plans," January 22, 2009

Figure 1-8 Pipeline Route under Construction between Turkmenistan and China

## - The Nabucco Pipeline and Caspian Sea Issue

Amidst growing expectations that Turkmenistan has become more open towards overseas energy corporations and investors since the start of the Berdymukhamedov administration, the Nabucco pipeline concept ${ }^{11}$ is once more attracting attention. Concerning the background to

[^38]this, the stoppage of gas supplies from Russia to Ukraine in December 2008 led to heightened demands for the diversification of gas supply routes to Europe. The pipeline will run from Erzurum in Turkey to Baumgarten an der March (gas hub) in Austria via Bulgaria, Rumania and Hungary with total length of $3,300 \mathrm{~km}$ and supply capacity of 31 billion $\mathrm{m}^{3}$ per year. The greatest feature of this route is that it doesn't pass through Russia and Ukraine. The United States supports the idea, however, it is opposed to the pipeline carrying Iranian gas.

One of the biggest problems with the Nabucco project is that the gas supplying nations have not been identified and no consent has been obtained from potential suppliers except Azerbaijan. Since Azerbaijan alone will be able to satisfy the expected demand, the pipeline planners are hoping that Turkmenistan and Kazakhstan will play a complementary role. However, so far both countries have not been enthusiastic about joining the scheme. Turkmenistan has continued to adopt an ambiguous stance despite the inauguration of a new president, and no actual progress has been made. Although Turkmenistan has agreed to sell gas to Europe via the Russia route, it has so far not agreed to supply via Nabucco. However, unless Turkmenistan joins the project, there is a strong likelihood that the gas supply capacity will be inadequate, and Turkmenistan thus holds an important card in determining whether or not the project comes to fruition. Pipeline plans, which entail economic, political and strategic problems, are being played out in extremely complicated circumstances pertaining to the gas supply to Europe, and Turkmenistan is likely to be posturing for an advantageous deal while keeping an eye on relations with Russia. The European Investment Bank (EIB) and EBRD have announced readiness to finance the Nabucco Project, while the European Commission announced its intention to loan 250 million euros via the EIB as part of its economic reconstruction program at the end of January 2009.


Source: BC News 18 January 2008, (http://news.bbc.co.uk/2/hi/europe/7195522.stm as of June 2009)
Figure 1-9 The Nabucco and South Stream Pipeline Plans

Preparations for the Nabucco project started in February 2002 when initial talks were held between Austrian OMV and Turkish Botas. In June 2002, five companies (OMV of Austria, MOL of Hungary, Bulgargaz of Bulgaria, Transgaz of Romania and Botas of Turkey) signed a protocol of intention to construct the Nabucco pipeline. In 2003, the European Commission
awarded a grant in the amount of $50 \%$ of the total cost of the feasibility study; on June 28, 2005, the Joint Venture Agreement was signed by the five Nabucco Partners; and the Ministerial statement on the Nabucco pipeline was signed on June 26, 2006 in Vienna. In February 2008, German RWE became a shareholder of the consortium, and on June 11, 2008, the first contract to supply gas from Azerbaijan through the Nabucco pipeline to Bulgaria was signed.

Regarding the future of Nabucco, it will be necessary to take other planned pipelines to Europe into account. One of these is the South Stream project, which will start from the Black Sea coast of Russia, pass under the Black Sea and through Bulgaria, Serbia and Hungary before reaching Austria, while a separate branch will pass through Greece to Italy. A feature of this route is that it cuts out Hungary and passes through only orthodox and Slavic nations. OMV, MOL and Bulgargaz have not abandoned the South Stream alternative that bypasses Turkey. Moreover, since this project partially overlaps with the Blue Stream pipeline linking Russia to Turkey via the Black Sea, it will need to be adjusted. Another alternative is to link the Blue Stream to Bulgaria, Serbia, Hungary and Austria.


Source: Gazprom website (http://www.gazprom.ru/eng/articles/article8895.shtml as of June 2009)
Figure 1-10 Blue Stream ${ }^{12}$ Gas Pipeline Project

## - Normalization of Relations between Turkmenistan and Azerbaijan

Nabucco is confronted with numerous difficulties, however, one of its most enthusiastic proponents is the transit nation of Turkey. At the end of November 2008, President Aliyev of Azerbaijan, President Berdymukhamedov of Turkmenistan and Prime Minister Erdogan of Turkey held talks on energy issues at Turkmenbasy. These talks were held because, in order

[^39]for Turkmenistan gas to flow through Nabucco, it will be necessary for Turkmenistan and Azerbaijan to resolve their conflict concerning the legal standing and boundaries of the Caspian Sea.

Following the inauguration of its new president, Turkmenistan has displayed the greatest diplomatic progress in its relations with Azerbaijan. During the 1990s, relations between the countries deteriorated because of a territorial dispute in the Caspian Sea and non-payment of gas debts by Azerbaijan to Turkmenistan, and the situation became so bad that the countries ended up recalling their respective ambassadors. However, following the demise of President Niyazov, relations displayed a marked improvement, to such an extent that the two sides are now discussing cooperation in the energy field. Both countries are in agreement on the need to diversify export routes.

On March 5, 2008, Turkmenistan and Azerbaijan resolved one of their long-standing issues when they reached agreement on the payment of US $\$ 44.8$ million by Azerbaijan for gas supplies dating back to the start of the 1990s. This paved the way to improve relations between the countries, which had deteriorated in the 1990s because of a dispute over the rights of ownership to offshore oil and gas fields in the Caspian Sea.

Such developments are the result of diplomatic efforts made by President Berdymukhamedov to improve relations with surrounding nations, and they also mean that one of the obstacles to the Nabucco project has been removed. However, in the event where Turkmenistan does participate in Nabucco, many challenges still remain. A pipeline (the Trans-Caspi Pipeline) will need to be laid under the Caspian Sea in order to transport gas from Turkmenistan to Azerbaijan, however, it will first be necessary to examine the technical and economic feasibility of this. At the same time, legal problems surrounding the Caspian Sea must be resolved, while relations with Russia could be delicate. Questions over the legal status of the Caspian Sea and the apportionment of rights of the five coastal nations (Russia, Kazakhstan, Turkmenistan, Iran and Azerbaijan) have been issues of dispute between the countries involved since the collapse of the Soviet Union, and they remain unresolved today.

Concerning the status of the Caspian Sea according to international law, Russia and Iran view it as a "lake" and the common resource of the coastal nations. They claim the validity of a treaty signed between Iran and the Soviet Union in 1921 and 1940 (establishing the indivisibility of the Caspian and preventing activities by foreign enterprises without the consent of coastal nations). From December 1998, although both countries have dropped their assertion that the treaty should be incontestable, their basic positions have remained unchanged. On the other hand, Kazakhstan, Turkmenistan and Azerbaijan claim that the Caspian is a "sea" according to international law. If this is the case, the coastal nations may claim territorial rights to resources in the water and on the continental shelf, etc. The specific points of contention in the Caspian currently pertain to oil and natural gas fields, transport routes (including submarine pipeline issues) and fishing rights, etc. Kazakhstan and Russia are currently moving in the direction of accepting a partition of the Caspian bed, however, they maintain that the water body should be shared. On the other hand, Azerbaijan and Turkmenistan are calling for a division of the bed and water body, while Iran is proposing to share the bed and water body but is also willing to accept a complete division of the Caspian if the other coastal states are willing to agree. The problem lies in the fact that Turkmenistan and Azerbaijan, which basically take the same standpoint, are clashing over who owns the Kyapaz-Serdar, Khazar and Osman gas fields.

## 1-3.4 Kyrgyz Republic

Kyrgyz Republic shares borders with China, Kazakhstan, Uzbekistan and Tajikistan, but it is
particularly influenced by China, Kazakhstan and Uzbekistan. China supplies massive quantities of commodities via Xinjiang Uyghur Autonomous Region and distributes them to all Central Asia out of the capital Bishkek and Kara-Say in the south. Kazakhstan, benefitting from recent economic growth, is boosting investments into the Kyrgyz financial sector, while many emigrant workers from Kyrgyz Republic travel to Kazakhstan in search of employment. However, in the wake of the worldwide economic crisis that began last year, emigrant workers who have lost their jobs in Kazakhstan are returning to Kyrgyz Republic and economic relations are now in a downturn ${ }^{13}$. Concerning relations with Uzbekistan, the presence of Uzbek minorities in the south of Kyrgyz Republic is an important point. In 1990, violent clashes between Uzbek and Kyrgyz ethnic groups broke out in Osh and caused more than 100 fatalities. Moreover, concerning water supply, Kyrgyz Republic, an upstream nation, faces complex issues when dealing with the downstream nations of Kazakhstan, Uzbekistan and Turkmenistan.

Kyrgyz Republic recognizes itself to be a minor nation and has until now adopted an omnidirectional diplomatic policy. It has so far permitted both the United States and Russia to establish military bases on its territory, however, a change has come over this policy since the start of 2009. Ever since Vladimir Putin came to power, Russia has strongly resisted moves by the United States and NATO to expand influence in the former Soviet theater and, viewing with alarm the colored revolutions and birth of pro-American governments in Georgia and Ukraine, it has been searching for opportunities to strike back. In particular, it adopted a hard-line attitude in the conflict with Georgia in August 2008.

Entering 2009, Russia announced plans to implement an aid program in Kyrgyz Republic worth US $\$ 2$ billion, and this coincided with an announcement by Kyrgyz Republic to close down a U.S. air force base within its borders. On February 19, the Kyrgyz parliament overwhelmingly adopted a resolution to close down the Manas U.S. Air Base, and this bill was signed by President Bakiyev and officially conveyed to the American side the next day. According to this, the United States was given 180 days to withdraw from the base. Manas Air Base was originally a commercial airport, however, Kyrgyz Republic gave the United States military permission to use it in December 2001 immediately following the September 11 attacks. Manas Air Base was used as a transit point for supplies and troops to support allied forces fighting in Afghanistan, and at one time it transported 1,500 troops and hundreds of tons of supplies to and from Afghanistan every month, while around 1,000 troops from the United States, France and the West were stationed there. For Kyrgyz Republic, income from charges on American aircraft using the base was no small amount, and leasehold negotiations were carried out on numerous occasions.

The policy switch by Kyrgyz Republic coincided with the deepening impact of the financial and economic crisis, and there is little doubt that the Russian offer of aid was extremely persuasive in this matter. Within the Russian aid package of US\$2 billion, the most appealing item was a loan of US $\$ 700$ million for the Kanbarata hydropower project. The plan for this project was originally compiled during the Soviet era, however, despite numerous approaches by the Kyrgyz government for support in recent years, no donor had been willing to offer assistance, primarily because doubts remained over the profitability of the scheme including the transportation of generated power. However, Russia's declaration of support in this instance was not merely an economic decision but was also motivated by strategic concerns. In response to this, Uzbekistan, as a downstream country that will have its water supply threatened, has voiced opposition.

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Source: World Bank, "Central Asia Regional Electricity Export Potential Study", (2004)
Figure 1-11 Electric Power System and Status of the Kanbarata Scheme in Kyrgyz Republic

The Government of Kyrgyz Republic permitted the Russian military to use Kant Air Base, located just 30 km from Manas, from September 2003, and around 500 Russian troops are stationed there. Since the U.S. air base in Khanabad, Uzbekistan was also closed down following the Andijon incident in 2005, the closure of Manas Air Base means that the West will no longer have any major installations demonstrating its military presence in Central Asia. Kyrgyz Republic has subsequently decided not to let any other countries apart from Russia to use its bases, however, there are conflicting reports that the government has not totally ruled out negotiations with the American side.

## 1-3.5 Tajikistan

Tajikistan's diplomatic relations are omnidirectional and embrace both the United States and Russia, and they are also characterized by links with the Islamic world, most notably Iran. When the Soviet Union invaded Afghanistan, Tajik nationals were mobilized to fill important posts on the border and utilize the services of Tajik citizens in Afghanistan. Also, Afghanis were offered education opportunities in Tajikistan, while Tajiks were given an active role in planning military strategies. Following the declaration of independence, conditions developed for the promotion of exchange with Iran based on cultural and linguistic commonality. Although differences exist between Iran, which is a Sunni Islamic state, and Tajikistan, which embraces secularism and Shi'a Islamism, Iran has been willing to overlook these and pursue close relations with Tajikistan while emphasizing areas of commonality and pragmatic relations. Iran realizes that over-emphasizing Islam will arouse the wariness of Tajikistan and has adopted a highly pragmatic approach to Central Asia. In contrast, as was mentioned earlier, Iran has constantly faced problems in its relations with Uzbekistan, while territorial disputes have hindered relations with Kyrgyz Republic. Moreover, as an upstream country containing the Amu Darya, Panj and other headwaters in the mountains, Tajikistan has experienced unique difficulties in its relations with downstream nations.

## - Issues of Military Base

Tajikistan is home to the base of the Collective Security Treaty Organization (CSTO) of the CIS at Dushanbe, and the Russian $201^{\text {st }}$ automated corps is stationed there. In view of this background, Tajikistan’s border with Afghanistan is not regarded as merely a single country border but rather the border of the CIS including Russia. The Russian military's presence in Tajikistan appears to be permanent and is linked to the suppression of narcotics flows out of Afghanistan and the need for proper border controls. In May 2009, CSTO joint military exercises were held in Armenia with participation from the Tajikistan Army. The CSTO is deeply interested in the outcome of the NATO and U.S. strategy in Afghanistan. Tajikistan also values its relations with the United States, and U.S. relations have been strengthened with the binding of an agreement to allow American Army non-military supplies to pass through Tajikistan territory.

Following the conflict with Georgia in August 2008, Russia has shown a keener interest in Ayni Air Base (Hisor) located 25 km west of Dushanbe. In response to the decision by the Government of Tajikistan to demilitarize the capital, Russia is reported to be negotiating with the Tajikistan side to allow its air force (VVS) to use Ayni ${ }^{14}$. Ayni Air Base fell into disuse following the collapse of the Soviet Union, however, an Indian enterprise repaired the runway and at one time it appeared that the Indian Air Force was seeking to utilize it. After that, the United States, NATO and France wanted to use Ayni instead of Dushanbe as a base for Mirage fighters in the war in Afghanistan ${ }^{15}$. The Tajikistan government has proposed joint use of the base, however, Russia is demanding the sole right of use ${ }^{16}$. Russia has offered to invest US\$5 million to complete work on the base facilities. Kant Air Base in Kyrgyz Republic is a rapid response installation for CIS security, however, Russia's intentions regarding Ayni are limited to its own autonomous use. Russia and Tajikistan are also discussing the joint production of armaments including those intended for export to third countries. It is intended to utilize the state enterprise Zarya Bostaka in the north of Tajikistan for this purpose.

Farkhor Air Base, located 80 miles from Dushanbe and 2 km from the Tajik-Afghan border, is used by the Indian Air Force. During the Afghanistan civil war that followed the Soviet withdrawal from Afghanistan, the Indian Army used this base as a hospital for casualties of the Northern Alliance. General Massoud of the Northern Alliance also received medical attention here. After the 9/11 attacks, Tajikistan gave the United States permission to use this base in the war in Afghanistan. India conducted renovations to the base from 2002, and an agreement concerning use was signed between India and Afghanistan in 2003 and ratified in 2004. This agreement permits the permanent stationing of the Indian Army at the base. The Indian Air Force has primarily used the base since the beginning of 2007, and the facility also serves as a store for armaments procured in Central Asia. Needless to say, Pakistan has expressed concern over Indian use of the base.

## - Economic Relations with Russia and Hydropower Projects

Tajikistan’s economic relations with Russia are also important, and 1.5 million Tajiks are currently working in Russia. Relations with the Russian enterprise Rusal at one point became strained over the Rogun hydropower plant project, however, close relations have been sustained. Rogun Dam is an unfinished dam across the Vaksh River in southern Tajikistan, situated 70 km upstream from Nurek Dam. When this dam and associated power generating facilities are completed, the power generating capacity will be 3.6 billion MW, which will not only exceed

[^41]Tajikistan's power demand but also enable it to export electricity. The estimated cost of this project is put at somewhere between US\$1~2 billion, however, no investors can be found who are willing to commit to the work. The government allocated 145 million somni (US\$42 million) of public funds to the project in 2008 and a further 500 million somni in 2009. Construction of the dam was first started in 1976 during the Soviet era, however, it was subsequently suspended. Russia once more announced cooperation geared to completion of the dam in February 2007, however, no progress has been made due to the dearth of funds. If this dam is completed, it will overtake Nurek Dam to become the highest in the world at 335 m , however, it was still only 60 m high as of 1993 and was destroyed by flood in the mid 1990s. As of 2006, two projects are under consideration: the original, 335 m , and an alternative one, 280-300 m, both having their advantages and drawbacks.

Russia previously made efforts to secure funding for the project, however, it failed due to disagreements over the dam height and ownership after completion. After that, Tajikistan adopted a more open approach in seeking overseas investors including Iran, however, Russia has responded by taking the stance that regional consent will be required in the event of constructing a new massive hydropower dam. This is in reality the same stance as adopted by the Government of Uzbekistan. In February 2009, a law was passed prohibiting the privatization of key strategic assets (hydropower plants such as Rogun and Nurek, and the state aluminum corporation Talco, etc.), however, this is likely to discourage foreign affiliated enterprises from investing in Rogun Dam. The Russian firm UES (United Energy Systems) is currently constructing Sangtuda-1 hydropower plant. Work on this was actually commenced at the start of the 1980s, however, it was suspended after only $20 \%$ was finished when Tajikistan gained independence. By 2004 Russia agreed to resume the construction work on condition that it holds a $75 \%$ shareholding, and the dam is now three-quarters finished and in operation. The dam is scheduled for completion at the end of 2009. Sangtuda-1 will have generating capacity of 670 MW or 2.7 billion kWh per year. In 2008, the plant generated 1 billion kWh of electricity.

Construction of Sangtuda-2 hydropower plant was commenced under support from Iran in February 2006. The ground-breaking ceremony was attended by the Iranian Speaker of Parliament and the Energy Minister of Afghanistan. The two units at this plant will have a combined generating capacity of 1 billion kWh . Meanwhile, China is boosting its presence as a loan providing nation.


Source: World Bank, "Central Asia Regional Electricity Export Potential Study", (2004)
Figure 1-12 Vakhsh River Basin in Tajikistan: Existing and Planned Hydropower Plants

## 2 Regional Cooperation Organizations in Central Asia

## 2-1 Developments of the Key Regional Cooperation Organizations in Central Asia

Following the demise of the Soviet Union, many of the Central Asian countries used to share the view with their neighboring countries about the necessity of developing the regional cooperation for promoting economic development in efficient and effective manner and have established a number of regional cooperation organizations in the region. The first materialization of such common thoughts has been the inauguration of the Commonwealth of Independent States on December 8, 1991 declared by President Yeltsin following the dissolution of the Soviet Union. The major regional organizations that have been established thereafter are as listed in the Table 2-1. In 1992, the Economic Cooperation Organization (ECO) created by the three countries of Iran, Pakistan and Turkey in 1985 has been reorganized and expanded into the Expanded Economic Cooperation Organization with participation by the Central Asian Countries. Major regional organizations that have been subsequently established include; Central Asia Regional Cooperation (CAREC) established in 1997; Eurasian Economic Community (EAEC) in 2000 and Shanghai Cooperation Organization (SCO) in 2001. Not necessarily, the five countries in Central Asia are not participating into all of those regional organizations. The organization which is participated by all of the five countries is ECO only ${ }^{17}$, whereas Turkmenistan is in the process of joining CAREC.


Source: the Study Mission
Figure 2-1 Participation of Central Asian Countries into Regional Cooperation Organization

[^42]Table 2－1 Outline of Major Regional Cooperation Organizations in Central Asia

|  | Commonwealth of Independent States （CIS） | Shanghai Cooperation Organization （SCO） | Economic Cooperation Organization （ECO） | Central Asia Regional Economic Cooperation（CAREC） | Eurasian Economic Community （EAEC）＊ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Full Name | Commonwealth of Independent States | Shanghai Cooperation Organization | Economic Cooperation Organization | Central Asia Regional Economic Cooperation | Eurasian Economic Community |
| Founded on | December 8， 1991 | June 15， 2001 | May 28， 1992 （current regime） | 1997 | October 10， 2000 |
| Governed by | Treaty | Treaty | Treaty | Unofficial | Treaty |
| Headquarter／ Secretariat | 【Headquarter】 Minsk，Belarus | 【Secretariat】 Beijing，China | 【Secretariat】 Tehran，Iran | 【Secretariat】 c／o CAREC Unit of ADB in Almaty，Kazakhstan | 【Secretariat】 <br> Almaty，Kazakhstan |
| Official Language | Russian | Chinese \＆Russian | English | English | Russian |
| Objective | －harmonization of diplomacy and peace and order policies， <br> －promotion of economic cooperation， <br> －enhancement of human rights and collaboration among the regional races， and <br> －harmonization of policies among the member countries in defense， immigration， environmental protection and legal systems． | －promotion of mutual trust and friendly relation among member countries， －promotion of effective cooperation in the fields of government policies， trade \＆economy， science\＆technology， culture，education， energy，transportation， environmental protection， etc．， <br> －joint undertaking for regional peace and order stabilization，and <br> －undertaking for solidifying the political and economic order based on the democratic and rational principles in the international horizon． | －sustainable economic development of member countries and mutual reduction of custom duties， <br> －promotion of the roles to be played by ECO countries in expanding the intra－regional and international trade， <br> －liberalizing the economy， privatization and utilization of the resources produced in ECO Region， <br> －development of the transport and communication infrastructure within and outside of the region， －efficient utilization of the latent agricultural and industrial capabilities of the region，and <br> －strengthening the | （Objective originally adopted） <br> －increase of the standard of living among member countries and economic growth through the effective and efficient regional economic cooperation， <br> （Objective of Expanded Charter） <br> －financing for infrastructure project， promotion of activities that cover cross－border issues such as transportation，in particular，roads，energy including water resources， external trade policies and custom duties，etc．and harmonizing their policy environment． | －controlling of the custom duties toward the establishment of the free trade system among member countries （unification of tariffs and documentation of legal framework for non－tariff barriers）， <br> －unification of foreign exchange control，－ creating the level playing fields for manufacturing and entrepreneurial activities， <br> －controlling of cross－border transfers of people and goods， <br> －promotion of the intra－region commerce， trades and transportation， and <br> －endowing the equitable access of education and medical care to the |

$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline & \begin{array}{c}\text { Commonwealth of } \\ \text { Independent States } \\ \text { (CIS) }\end{array} & \begin{array}{c}\text { Shanghai Cooperation } \\ \text { Organization } \\ \text { (SCO) }\end{array} & \begin{array}{c}\text { Economic Cooperation } \\ \text { Organization } \\ \text { (ECO) }\end{array} & \begin{array}{l}\text { Central Asia Regional } \\ \text { Economic } \\ \text { Cooperation(CAREC) }\end{array} & \begin{array}{c}\text { Eurasian Economic } \\ \text { Community } \\ \text { (EAEC)* }\end{array} \\ \hline & & & \begin{array}{l}\text { cooperation linkage } \\ \text { among member countries } \\ \text { for effective control of } \\ \text { drug trafficking, } \\ \text { environmental protection } \\ \text { and cultural linkage. }\end{array} & & \text { countries. }\end{array}\right]$

[^43]
## 2-1.1 CIS and its Collective Security Treaty Organization (CSTO)

## 2-1.1.1 Organizational Profile

## - Historical Background

On December 8, 1991, President Yeltsin, the President of Ukraine, Leonid Makarovich Kravchuk and the chairman of Supreme Soviet of Belarus, Stanislav Shushkevich of Belarus met, agreed and declared in Belovezhskaya Pushcha (Belovesh Forest) in Belarus for dissolving the Soviet Union and establishing the Commonwealth of Independent States. Succeedingly on December 21 of the same year, eleven of the former Soviet Union countries ${ }^{18}$ with exception of three Baltic countries and Georgia met in Kazakhstan and made the Almaty Declaration by virtue of which CIS was inaugurated in its substance.

Three Baltic countries of Lithuania, Estonia and Latvia became independent from the former Soviet Union prior to the establishment of CIS and joined European Union (EU) in May 2004.

## - Objective of the Organization

CIS is created as the supra-national alliance of member countries that substantively control and orchestrate the foreign policies, trades, finances, legal systems, peace and order control, etc. The organization aims at intervening directly into the political judgment and activities of member countries in such areas as; promotion of human rights; democratization for enabling the collaboration among the region's races; cooperation for preventing crimes; activities against the terrorism; promotion of economic cooperation; harmonization of defense and immigration policies, etc. The function of the organization does not stay within the realm of symbolic unification while it maintains the Charter for the Commonwealth of Independent States adopted in January 1993 which specifies the sovereign equity, non-aggression and territorial rights, etc. In despite of such noble status, the customs union agreed and formed among Russia, Belarus, Kyrgyz Republic and Kazakhstan was not successful in inviting other member countries. In the economic front, member countries were finding it difficult to go along with the overall policy of CIS as each member is absorbed in preparing and implementing its own economic reform policy and no room for accommodating the supra-national directives.

## - Member Countries

At its inauguration, CIS used to be comprised of 11 members that were; Russia, Ukraine, Belarus, Azerbaijan, Armenia, Kazakhstan, Kyrgyz Republic, Uzbekistan, Turkmenistan and Moldavia and was later joined by Georgia in 1993. However, Georgia withdrew from CIS in August 2008 due to the confrontation with Russia over South Ossetian War (the withdrawal took effect in August 2009). Being joined by the sub-members of Turkmenistan, Ukraine and Moldavia, the number of official members stands at 8 as of present.

Collective Security Treaty Organization (CSTO) of CIS is of the nature of a security treaty organization in which the roles and activities of CIS are evidently spelled out while it is deploying cooperative actions with Eurasian Economic Community (EAEC). CTSO convened on February 26, 2009 in Moscow attended by the foreign ministers of member countries for discussing the guidelines for mutual cooperation of the Organization. The guidelines are intended to address the important issues such as; military aggression; international terrorism; drug trafficking; cooperation in the energy sector in case of emergency. Among the items to be included will be the ones like hydro-technology and other strategically important objects such as

[^44]transport system, air space defense and rehabilitation from human and natural disasters, etc. It is agreed and arranged that CSTO and EAEC collaborate in helping the capacity development of the legal staff engaged in the border and custom control and work together in assisting Afghanistan in its reconstruction efforts from its war-dispute. With a specific respect to the guidelines prescribing major cooperative activities between the rapid military reaction force and EAEC it was agreed that the guidelines were to be drafted by the joint meeting of the secretariat of CSTO and the EAEC Integration Committee. To be specifically noted is that EAEC is aiming at a joint action with CIS in the fields of the peace and security issue and assistance to Afghanistan by going beyond the realm of economic cooperation. Also in 2007 a noteworthy event took place in Tajikistan in which CIS agreed with the Shanghai Cooperation Organization (SCO) over the issues of security, crimes and drug trafficking.

## 2-1.1.2 Recent Development

## Recent Events

## 【Recent Summit Meetings of CIS】

- May 2007: An agreement was reached on the expansion of electricity trades within CIS and on the establishment of a common market enabling member countries with expanding demand to have an access to the electricity supply.
- May 2006: Discussed on the improvement of the efficiency in the organizational structure of CIS but ended with no definitive declaration.
- August 2005: Adopted the agreement for military cooperation covering up till 2010 and cooperation against terrorisms.
- April 2004: Agreements were reached on the cooperation against the terrorisms, transport issues and on the establishment of a center for counter terrorism.

Aside from the above, conferences are held several times in each year in which the members discuss continuously the subjects such as; counter terrorism action; measures for coping with the expansion of the demand for electricity; transport; eradication of HIV Aids; etc. of whose outputs not much are heard with exception of the ones in military cooperation.

## 2-1.2 Eurasian Economic Community (EAEC)

## 2-1.2.1 Organizational Profile

## - Historical Background

Since gaining independence the Central Asian countries have made continuous efforts for regional cooperation. As stated above, the twelve countries out of the 15 former Soviet Union constituents established the Commonwealth of Independent States including the belated joining by Georgia with exception of the three Baltic nations; Estonia, Latvia and Lithuania who had been conspicuously moving away from Russia. The forming process of the Commonwealth differs from that of EU who has gradually been unified through the deepening of cooperation among the originally independent nations whereas CIS has been formed through the proclamations by the countries that had been solidly bound under a federal government whose process bears a sense of retaining the countries bound together within a circle which would otherwise be dismantled loose.

Given the background as such, Eurasian Economic Community (EAEC) was created in October

2000．The Community was intended to establish an ideological pole for unification under the leadership of Russia while the customs union originally intended for CIS was becoming dysfunctional．The Community maintains its goals at achieving；an open economic space； establishment of a common trade rules and a free trade zone；socio－economic development；a common market for transport services and a common energy market；improvement of the standards of education and medical services．

EAEC is comprised of the member countries of；Russia，Belarus，Kazakhstan，Kyrgyz Republic and Tajikistan．The Community has the population exceeding 200 million with the total area which is tantamount to that of former Soviet Union．Should the observer countries of Moldavia，Armenia and Ukraine join the Community，it will become the size that exceeds EU and will have the influential power which needs to be followed with attention．

## －Objective of the Organization

EAEC aims at establishing the relationship among the member countries in the fields of peace and security within the Community and of multi－dimensional economic aspects．The priority goals have been identified in the across the board management of custom system，in particular， the unification of the tariff，being a prerequisite for establishing a free trade regime，and the abolition of non－tariff trade barriers．In addition，the Organization aims at achieving； standardization of the foreign exchange control；promotion of cross－border commerce， international trades，enhancing of transport as well as development of the level playing fields for the entrepreneurial activities．

## －Member Countries

The Top Leader Conference held on October 6， 2007 agreed that Russia，Belarus and Kazakhstan collectively start the customs union by 2010．President Putin（then）made an aggressive remark that the Community would potentially emerge as a rivalry force to EU． Meanwhile，Uzbekistan withdrew from EAEC in late November 2008.

## 2－1．2．2 Recent Development

## －Recent Events

【Actions taken against the Economic Crisis】
The conference held in Moscow in February 2009 has agreed on the establishment of a fund with assets of US\＄ 10 billion aimed at coping with the financial crisis through provision of financial assistances to the member countries as well as for the promotion of international investments．The target for investment is identified as the agriculture．The funds are to be contributed by Russia for US\＄ 7.5 billion and by Kazakhstan for US $\$ 1.0$ billion．

Russia appears to be attempting to expand its influence over the former Soviet Union countries taking advantage of the global financial crisis．Countries of Belarus，Kazakhstan，Kyrgyz Republic and Tajikistan accept or are in the direction of accepting the economic assistances from Russia．Russia is reported to be providing financial assistances to the countries even beyond the members of EAEC as it provides Armenia with US\＄ 500 million，Mongolia with US\＄ 300 million and probably to Ukraine under certain political conditions．

## 【Materialization of a Free Trade Zone】

The prime objective of EAEC lies in the establishment of the free trade regime．The concept of the trade regime that had been nominal and dysfunctional has gained an opportunity to
materialize in EAEC where the three countries of Russia, Belarus and Kazakhstan agreed and launched a free trade area. Towards the future there remains a critical issue whether EAEC succeeds in expanding the free trade zone to cover all the participating members of the Community.

【Collaboration with Other Regional Cooperation Organizations】
EAEC has agreed and signed a memorandum of understanding with Shanghai Cooperation Organization on the cooperation in the multiple areas of; international trades, energy, environmental protection, transportation, investments, tourism, education and health, etc.

## - Evolution of the Regional Cooperation Organizations of Close Relationship with EAEC

The area which is presently called Central Asia had been called Central Asia (Middle Asia) and Kazakhstan under the former Soviet Union regime. The Central Asia then called used to include Kyrgyz Republic, Uzbekistan and Tajikistan but did not include Kazakhstan. At one time, Kazakhstan had been extensively Russianized as having been settled by the Slavic people, including the Russians, that had been the result of the campaign of the "Virgin Lands" promoted during the reigning by Secretary Khrushchev. Kazakhstan was incorporated into the concept of Central Asia during the process for independence in which the five countries in the Central Asia formed and launched Central Asian Community (CAC). CAC changed its name to Central Asian Economic Union (CAEU) in 1994 to which Tajikistan and Turkmenistan did not participate. In 1998, the Community altered its name again to Central Asian Economic Community (CAEC) to which Tajikistan succeeded to recover its membership. In 2001, it has been renamed again to Central Asian Cooperation Organization (CACO). Similar to the other treaties of CIS, the successive stages of the cooperation organization used to hoist high levels of targets that had been reduced into the mere forms in their implementation. Nevertheless, the fact that organizations such as CACO existed indicates that the conditions surrounding the Central Asia are more or less similar among the countries, in particular, the stages of economic developments; cultural commonality such as Islamic traditions; complementary positions of water and natural resources; etc. Such fact of complementary nature would have been the reason that none of the member countries could have denied the importance and indispensability of cooperation. The declaration of independence by each country had caused the countries of Central Asia to loose the arbitrator mediating the confrontation of interests between the member nations. Due to the stagnant condition of the regional cooperation, there was a time at which Turkmenistan showed its reluctance toward regional cooperation.

In 2004, Russia joined CACO and it created a situation where many of its members overlap with those of EAEC accompanying a change in the organizational character of CACO to the effect that the organization is no longer unanimously comprised of Central Asian countries. What is indicated by the change is that Russia increased its influential power through its presentation and such fact itself is construed as Russia's attempting to return to the former Soviet Union regime. Uzbekistan withdrew from GUUAM ${ }^{19}$ in 2005 and joined EAEC in 2006. GUUAM is a loosely bound conference body among the countries which have been staying at arm’s length from Russia, Georgia, Ukraine, Uzbekistan, Azerbaijan and Moldavia. Due to such changes taken place, CACO has ceased its operation and been absorbed and integrated into EAEC. During such process, the observer countries of Georgia and Turkey to CACO did not join EAEC and the whereabouts of their statuses are not known.

[^45]
## 2-1.3 Shanghai Cooperation Organization (SCO)

## 2-1.3.1 Organizational Profile

## - Historical Background

Shanghai Cooperation Organization (SCO) is the only regional cooperation organization that has been promoted under the initiative taken by China. In its preliminary phase of formulating, the top conference called Shanghai Five SCO started in 1996 under the initiative by President Jiang Zhe Ming of China. The conference used to be comprised of top leaders of five countries of China, Russia, Kazakhstan, Kyrgyz Republic and Tajikistan. The conference aimed at fostering the mutual trust between China and its adjoining former Soviet Union countries which became independent with the ultimate purpose of fixing the border line between China and those adjoining nations ${ }^{20}$.

At the time the conference was making striving efforts for agreeing on the border lines, there occurred the upsurge of Islamic Extremists as the common issues of concern among the participating top leaders. Each member country of the conference used to be plagued in confronting with the Islamic Extremism in its own country on separate accounts of issues such as; Chechnya Wars and Unrests for Russia; Separatist Movement by Uyghuristan Tribe for China; Islamic Movement of Uzbekistan (IMU) and other anti-government movements based on the Islamic Fundamentalism for Central Asian countries. In the summer of 1999, there occurred an incident in which the mining experts from Japan were kidnapped and taken into hostages by IMU related criminals in Batken Province of Kyrgyz Republic. Incidentally, there happened an abortive terrorist attack presumably targeted the President in Tashkent of Uzbekistan.

Given the background as such, Shanghai Cooperation Organization (SCO) has been established in June 2001 as the permanent regional cooperation organization in succession and maintaining the framework of Shanghai Five with its substantive purpose in anti-terrorism. The participation by Uzbekistan which is not an adjoining country to China elucidates the evident change in the character of SCO. The Organization determined to conduct a joint military exercise in the preventive countermeasures against terrorism that directed the Organization toward the military alliance securing the peace and security in the region. In particular, China has been concerned if the countries like Kazakhstan and Kyrgyz Republic would become the hotbeds for the separatist movements by provoking and supporting the tribal movements in Xinjiang, as there live the ethnic minority groups of Uyghuristans, one of the Chinese tribal races, in those countries. These are the underlying reasons that unmistakably prompted the countries to strengthen their military ties through the Organization.

## - Objective of the Organization

The objective of SCO is to strengthen the mutual trust and friendly relationship among the members. To be specific, the Organization intends to intensify efforts for maintaining the peace in the region and stabilizing the security order. The objective further looks for establishing a democratic and equitable international orders in the political and economic fields by promoting the cooperation in the fields of; government policies; trade and economy; science and technology; culture; education; energy; transportation; tourism; environmental protection; etc.

[^46]
## 2-1.3.2 Recent Development

## Recent Events (Top Leader Conferences)

## 【Recent Summit Meetings of SCO】

- On November 2, 2007, the Top Leader Conference of SCO convened in Tashkent at which then Prime Minister Zubkov of Russia appealed the necessity to establish an energy club among the Central Asian nations while denying the club should to target of becoming a mini-OPEC. It appeared that Russia wants to coordinate the energy policies in between Russia and member nations, in particular, with China.
- In August 2008, Dushanbe Declaration was agreed and released. The statement welcomed the ceasefire of armed collisions in Georgia and incorporated an evaluation of the role Russia to play for the regional peace keeping and an opposition against the MD. The Conference failed to incorporate into the statement a clear support for Russia in respect of Georgian issue.
- In October 2008, Shanghai Cooperation Organization (China, Russia, Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan) held its Top Leader Conference. Among the agenda was the discussion on the change of the currency for the intra-region trades from U.S. Dollar to the Region's currency. The topic was suggesting a certain symptom of moving away from U.S. Dollar and respect for the existence of Euro.


## - Member Countries

Since 2004, SCO has gradually expanded the cooperation in the socio-economic aspects in addition to the measures to cope with the terrorism attacks. To have been specifically noteworthy through the process is the expansion of observer nations. In 2004, Mongolia joined the Conference as an observer and so did India, Pakistan and Iran in 2005. It has resulted into the fact that SCO has become a gigantic organization which is comprised of the majority of the nations in Eurasia by counting the observer nations. One can interpret the intention of China and Russia by accepting Iran which has been in confrontation with U.S.A. being to the effect that SCO plays the resisting role against the hegemony led by U.S.A. China and Russia has demonstrated the existence of the ideological pole which stands contrary to U.S.A. through SCO. Simultaneously, the two nations could have resorted to the pluralistic approach in their diplomatic tactics in entering into a negotiation with U.S.A. for cooperative relationship against the background of Iran joined SCO. What can be clearly pointed out, however, is the fact that the overall character of its members is, at its best, "non-U.S.A" or "non-Western" but could never be the one that can be unified as "anti-U,S.A.". SCO is neither the organization which is sufficiently united internally so as to share a common diplomatic posture nor it is practical to look for. It should also be noted that while the organizational structure appears to be developed, the significance and expectations of the members and observers towards SCO differ nation by nation and the organization is not bound sufficiently enough to accommodate a common diplomatic policy. For example, Pakistan remains anxious about utilizing SCO whereas India takes the position of minimum involvement with the organization. Diplomatic policies of the members are diversified in such a manner that Mongolia maintains the position of promoting a friendly relation with U.S.A. whereas Kazakhstan is exerting omni-directional diplomacy. The importance China has placed on SCO is revealed in the fact that President Hu Jin Tao has offered a buyers’ credit of US\$ 900 million at the occasion of the Top Leader Conference of SCO in June 2004 held in Tashkent. As to the actual utilization of the credit, there is no reliable information if it were actually appropriated.

- Others

SCO conducts its military practices for the purpose of counter terrorism every year. In 2007, specifically, the six member nations of SCO launched its first exercise of joint military practice "Peace Mission 2007". The extent of the practice was significantly large with participation of 1,600 army force from China, 2,000 army force from Russia and armies from other member countries. Among the member countries, Kazakhstan, Kyrgyz Republic and Tajikistan dispatched a special forces and airborne troop whereas Uzbekistan dispatched a high-rank officer's mission.

## 2-1.4 Economic Cooperation Organization (ECO)

## 2-1.4.1 Organizational Profile

## - Historical Background

ECO is an organization for economic cooperation founded in 1985 by the non-Arabian Islamic nations of Iran, Turkey and Pakistan for the purpose of promoting the commercial and cultural exchanges. Its predecessor was Regional Cooperation for Development (RCD) founded in 1962 and remained active up till 1979 when the Iranian Revolution took place. RCD used to be the economic cooperation organization within the Baghdad Treaty Organization that had been a military alliance standing against Soviet Union during the early period of the Cold War. Immediately after the demise of former Soviet Union, ECO was joined in November 1992 by the five countries of Central Asia, Azerbaijan and Afghanistan. ECO expanded significantly by increasing the number of its members to ten when those nations were added to the previous members of three nations, Turkey, Iran and Pakistan. The head office of the Organization is placed in Tehran while maintaining its Economic Bureau in Pakistan and Science Bureau in Turkey. ECO has been granted in 1995 to participate as an observer to Organization of the Islamic Conference (OIC). In September 1996, the Organization has adopted a new charter. In 2009, Turkmenistan has changed its member status to sub-member.


Source: ECO website: http://www.ecosecretariat.org/
Figure 2-2 Member Countries of ECO

## －Objective of the Organization

ECO has adopted its objective as the establishment of a common market similar to that of EU and aims at promoting the trade and economic cooperation for the objective．To be specific， ECO aims at attaining the sustainable economic development among the member nations， promoting the intra－region trades，maintaining a friendly cross－border relationship and expanding the international trades，facilitating the liberalization of economy and privatization． The objective further looks for；promoting an effective utilization of the material and resources produced within the region as such will develop the potential productive capability in agricultural and industrial production；for developing the energy，transportation as well as the communication infrastructure within and outside the Organizational territory；for developing the human resources；etc．

## －Development of the Organization

It appears that the symbolic nature of ECO＇s role is surfacing lately．On March 11，2009，the Top Leader Conference of ECO was held in Tehran to which President Rahmon of Tajikistan， President Berdimuhamedow of Turkmenistan and President Ahmadinejad of Iran attended and presumably discussed about the outlook of Afghanistan after the change of administration took place by the inauguration of President Obama in U．S．A．and on the optional choices of peace and security regime．ECO maintains a special fund for the reconstruction of Afghanistan while the size of such funds is yet to be known．

## 2－1．4．2 Recent Development

－Recent Events

## 【Recent Summit Meetings of ECO】

－On September 14，2004，the $8^{\text {th }}$ Summit of ECO adopted and released Dushanbe Declaration which appealed that ECO was to become an effective organization to promote democratization，regional growth and development．It further elucidated that member nations would gradually become the full fledged members within the international economic community．At the Conference，Pakistan committed on granting the aid amounting US\＄ 5 million to Afghanistan for its development projects．
－On May 5，2006，the $9^{\text {th }}$ Summit of ECO adopted and released Baku Declaration which expressed a satisfaction to the ratification of the trade agreement of ECO by Afghanistan， Pakistan and Tajikistan and confirmed ECO＇s intention to establish the free trade zone by 2015．〔Prior to the agreement，member countries of ECO signed the ECO Trade Agreement（ECOTA）in July 2003 under the intermediation by UNDP in which member countries agreed to reduce custom duties．In 2005，the initial members of ECO，Turkey， Iran and Pakistan agreed and established Economic Cooperation Organization Trade Development Bank with the initial capital of SDR 300 million which launched lending of funds to the less developed countries and to the promotion of the intra－region trades．The Summit further agreed to facilitate the peace and security against the terrorism，drug trafficking，etc．and to enhance the capability for mutual coordination．
－On March 11，2009，the $10^{\text {th }}$ Summit of ECO adopted and released Tehran Declaration which announced the decision reached that the working group comprised of experts from ECO member countries would conduct a research analyzing the impact of the international financial crisis upon the member countries for finding out the migrating measures of such impacts．The statement expressed its satisfaction on the contribution made by Azerbaijan， Turkey，Iran and Pakistan committing their contribution to the special fund for the reconstruction of Afghanistan and confirmed its readiness and commitment for prompting the reconstruction process．

## 2-1.5 Central Asia Regional Economic Cooperation Program (CAREC)

## 2-1.5.1 Organizational Profile

## - Historical Background

Central Asia Regional Economic Cooperation Program (CAREC) was established in 1997 with the aim at increasing the standard of living and reducing the poverty through the implementation of the substantive economic cooperation among the regional member countries. In March 2000, CAREC has set up its secretariat office within the CAREC Unit of ADB located in Almaty of Kazakhstan.

## - Objective of the Organization

CAREC has been designed to be the implementing organization of the plans to be developed for the purpose of increasing the standard of living and promoting the economic growth through the economic cooperation in the region.

CAREC places its priority upon the improvement of the surface traffic and transportation for expanding the intra-region trades within a large size of market, reducing the transportation cost and improving the intra-region transportation as the Central Asia is strategically located at the geographically important position for bridging the European, Far East Asian countries and Russia. Specific targets are set for improving the electricity supply, efficient utilization of energy including water resources, consideration for the traffic accidents and environmental protection based on which priority sectors are identified in transport, energy, trade policy and facilitation, etc. to plan and implement specific projects for development.

One of the characteristic of CAREC activities is the practice that to all of the programs it implements, it is inviting international institutions such as World Bank, etc. to participate as the co-sponsors. The aggregate size of the funds invested by CAREC has been US\$ 2.3 billion during 2006 through 2008.

## - Development of Organization (Member and Participating Institution)

The members of CAREC are comprised of the four countries in the Central Asia; Uzbekistan, Kyrgyz Republic, Tajikistan, Kazakhstan and four other countries of; Mongolia, Afghanistan, Azerbaijan and China which make the total number of member countries to be eight. The Organization is currently considering of inviting Turkmenistan and Russia for participation.

Up till today, CAREC carried out its activities in providing finances for infrastructure development and strengthening of the institutional capability of the policy making organs for priority sectors (transportation, energy, trade policy and facilitation). Those programs of CAREC assistance are also joined and supported by the alliance of the multilateral financial institutions which include, ADB, EBRD, IMF, Islamic Development Bank (IsDB), UNDP and World Bank. Since 2000, the CAREC Unit of ADB has been acting as the secretariat of the Organization. CAREC is carrying out its activities in coordination with the important regional cooperation organizations which include Shanghai Cooperation Organization and Eurasian Economic Community (EEC). The activities of the multilateral financial institutions have extended assistances to 42 projects in the priority sectors of transportation, energy and trades with the amount totaling US\$ 2.3 billion during 2006 through 2008. CAREC maintains its policy of complying with the five principles established by the Paris Declaration for Aid Effectiveness endorsed in 2005; Ownership; Alignment; Harmonization; Results; and Mutual

## Accountability ${ }^{* 21}$.

## 2-1.5.2 Recent Development

## - Overview of Activities

The activities carried out by CAREC are reviewed for each of the priority sectors in the following section;

【Transport】
CAREC has identified key issues its member countries are faced and set up six strategic priorities. For the execution of the strategies, CAREC established Transport Sector Coordinating Committee in June 2004. The committee reviews the progress of cooperation biannually and is providing guides that are deemed necessary.

Table2-2 Issues and Strategies in the Transport Sector

| Key Issues | Six Strategies |
| :--- | :--- |
| Inefficient cross-border and transit movement of <br> people and goods due to excessive bureaucratic <br> procedures. | Harmonization and simplification of <br> cross-border transport procedures and <br> documentation among the three member <br> countries. |
| Lack of unified transport regulations, discretionary <br> tariff setting, limited private sector participation, <br> etc. | Harmonization of transport regulations among <br> the member countries to promote efficiency <br> and better services. |
| Inadequate regional transport networks, lack of <br> connections to production centers, markets and <br> ports, etc. | Development and improvement of regional <br> and international transport network to link <br> production centers with markets within the <br> member countries. |
| Lack of competition in railways, obsolete track and <br> rolling stock and commercial management of <br> operation. | Restructuring and modernization of railways <br> through private sector participation. |
| Lack of regional approach in civil aviation and low <br> intra-regional air services. | Improvement of sector funding and <br> management to ensure that the regional <br> transport network is operated and maintained <br> properly. |
| Limited institutional and human resource capacities <br> in the transport sector resulting in the weak <br> planning for transport policy and public investment <br> planning. | Liberalization of civil aviation with a view to <br> the enhancement of inputs from private <br> business and tourism. |

Source: ADB website, (http://www.adb.org/Carec/transportation.asp as of June 2009)

The projects that have been implemented in Central Asia for the last few years are as listed below;

[^47]Table 2-3 Projects Assisted in the Central Asian Countries

| Country | (Unit: million USD) |  |
| :--- | :--- | ---: |
| Tajikistan | Dushanbe-Kyrgyz Border Road Rehab. (Phase 3) | Amount of Loan |
|  | - ditto - (Stand by) | 20 |
|  | -ditto - | 20 |
| Uzbekistan | Regional Railways Rehabilitation | 400 |
| Kyrgyz Republic |  <br> Safety (including \$20m Stand by of 2007) | 20 |

Source: ADB website, (http://www.adb.org/Carec/regional-pipeline-2006.asp as of June 2009)

The projects that have been implemented in the countries other than the five of Central Asia and the ones implemented in the whole region of CAREC member countries are as listed in the Table2-4;

Table2-4 Projects Implemented in the Whole Region of CAREC

| Country | Project | Amit: million USD) |
| :--- | :--- | ---: |
| Mongolia | Regional Transport Project | 20 |
|  | Western Regional Road Corridor Development | 20 |
|  | - Ditto - | 650 |
| Azerbaijan | Southern Road Corridor Improvement | 100 |
|  | - ditto - (Stand by) | 100 |
| Xinjiang, China | Regional Road Development Study (for2006-2010) | 400 |
| China | Regional Transport | 600 |
| Whole Region | Policy Reforms in the Transport Sector | 600 |
|  | Regional Railway Development Phase 1 | 850 |
|  | Regional Traffic Enhancement | 50 |
|  | - ditto - | 600 |
|  | Regional Road Development Phase 1 | 600 |
|  | Harmonization of Cross-border Initiatives | 850 |

Source: ADB website (http://www.adb.org/Carec/regional-pipeline-2006.asp as of June 2009)

## 【Energy】

In November 2005, seven countries of; Azerbaijan, China, Mongolia, Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan (excluding Afghanistan) established CAREC Members Electricity Regulators Forum (CMERF) to reform their power sectors and work towards closer cooperation in meeting power demand in the region and facilitating power exports.

CAREC recognizes the endowments of energy resources in each of the member countries as follows;

Table2-5 Energy Resources of CAREC Countries

| Country | Energy Resource |
| :--- | :--- |
| Kazakhstan | Oil and Coal |
| Kyrgyz Republic and Tajikistan | Huge Potential of Hydro-electric Energy |
| Uzbekistan | Natural Gas |
| China | Oil and Coal |

Source: ADB website (http://www.adb.org/Carec/regional-pipeline-2006.asp as of June 2009)

The projects that have been implemented in the energy sector of five countries of Central Asia are as listed in the Table2-6;

Table2-6 Projects Implemented in Central Asian Countries

| Country | Project | Amount of <br> Loan |
| :--- | :--- | ---: |
| Kazakhstan | 500 kv North-South Power Interconnection | 500 |
|  | - Ditto - | 100 |
| Tajikistan | Strengthening Power Supply | 500 |
|  | Regional Gas Transmission Improvement | 10 |
|  | Power Rehabilitation Phase 2 | 23 |
| Kyrgyz Republic | Regional Gas Transmission Improvement | 20 |

Source: ADB website (http://www.adb.org/Carec/regional-pipeline-2006.asp as of June 2009)

The projects that have been implemented in the countries other than the five of Central Asia and the ones implemented in the whole region of CAREC member countries are as listed in the Table 2-7;

Table 2-7 Projects Implemented in the Whole Region of CAREC

|  | (Unit: million USD) |  |
| :---: | :---: | :---: |
| Country | Project | Amount of Loan |
| Azerbaijan | Reinforcement of Power Interconnection Between Azerbaijan and Iran | 50 |
|  | - ditto - | 500 |
| Whole Region | Rehabilitation of the Central Asia-Europe Gas Pipeline | 300 |
|  | - ditto - | 500 |
|  | Power Transmission Reinforcement \& Interconnection | 100 |
|  | - Ditto | 500 |
|  | Mitigation of Trans-Boundary Air Pollution from Coal Fired Power Plants in Northeast Asia | 800 |
|  | - ditto - Stand by | 800 |
|  | Regional Gas Transmission Improvement Phase 2 | 800 |

[^48]【Trade Policy and Facilitation】
Trade Policy Coordinating Committee (TPCC) established within CAREC has been conducting the studies of; regional analysis of existing trade barriers in Central Asia and an evaluation of the potential benefits of adopting measures to facilitate trade; regional analysis of the impact of WTO accession in respect of the agricultural policy. The Trade Facilitation Program, being participated by all of the eight CAREC member countries, is continuing its strenuous efforts for modernizing the custom duty system through a comprehensive facilitation approach based on the collaboration among the custom bureaus themselves of member countries and partnership with the private sector.

The projects that have been implemented the whole region of CAREC member countries are as listed in the Table2-8;

Table2-8 Projects Implemented in the Whole Region of CAREC

| Country | Project | Amount of Loan |
| :---: | :--- | ---: |
| Tajikistan | Regional Customs Modernization \& Infrastructure <br> Development, Phase 2 | 10 |
|  | - ditto - including Stand by | 310 |
|  | Integrated Regional Trade Facilitation Strategy for <br> Individual Countries, Phase 2 | 800 |
|  | - ditto - | 700 |
|  | Logistic Development to Support Regional Trade <br> Facilitation | 800 |
|  | Promoting the Development of Insurance Industry to <br> Support Regional Trade Facilitation | 700 |

[^49]

Source: ADB, "Central Asia Regional Cooperation Strategy and Program Update 2006-2008", (2005)
Figure 2-3 Member Countries of CAREC

Box2-1 Collaboration between Private Sector NGO and Donors
While not being a regional cooperation organization, it is imperative to take into consideration of the organization such as Aga Khan Foundation in discussing ODA assistance to the countries of Central Asia, Afghanistan and Pakistan. Aga Khan was an Imam of Ismaili Shi'a and the 49th religious leader since the prophet Muhammad. Ismaili Shi'a has been residing in the Pamir Mountains of Tajikistan. Aga Khan Foundation has been targeting Afghanistan, Pakistan and Central Asian countries for its assistance. Aga Khan Development Network (AKDN) established by Aga Khan Foundation has been targeting the social sector. The scale of assistance is found to be comparable in some countries with those of official donors. The Foundation may choose collaboration with other donor and the activities of AKDN therefore cannot be disregarded. The Foundation is constructing Central Asia University where it targets to bring up experts for the development of the mountainous region. The university is planned to have campuses at Takeli of Kazakhstan, Naryn of Kyrgyz Republic and Khorog of Tajikistan.

## 2-2 Impacts and Future Direction of Regional Cooperation Organization in Central Asia

## 2-2.1 Central Asia as a Whole

The objectives of the Regional Cooperation Organizations are different and the impacts created differ from one to the other. Russia appears to be aiming at expanding its influences by taking advantage of the global financial crisis within the framework of EAEC. Nevertheless, countries of Belarus, Kazakhstan, Kyrgyz Republic and Tajikistan are or in the direction of accepting economic assistances from Russia. Despite that the recipients are non-members, EAEC provides Armenia with US\$ 500 million, Mongolia with US\$ 300 million and is reported possibly to include Ukraine among the recipient countries, should it be with certain conditions. Russia is providing assistances to Iceland which stands outside of former Soviet Union sphere of influence. On the contrary, Uzbekistan notified EAEC for its suspension of membership in October 2008 which makes it questionable if Russia retains the country among its aid recipients. Nonetheless, all of those cases are reflecting the Russian needs for peace and security perspective.

SCO and ECO have been exploiting the probabilities of cooperation in the fields of; transport and communication network; and natural resources and energy issues. In particular, a close attention is being given to the development and construction of the transport and communication network linking the north and south of Eurasian Continent. In order to endorse it as a rational target, focusing is made on Afghanistan in the perspective of the peace and order issue and of transport channel.

Table 2-9 Major Regional Cooperation Organizations: Participating Status

|  | CIS | SCO | ECO | CAREC | EAEC |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Kazakhstan | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Tajikistan | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Uzbekistan | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\times$ |
| Kyrgyz Republic | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Turkmenistan | $\bigcirc$ |  | $\bigcirc$ | $\Delta$ |  |

(〇: Member, O : Sub-member, $\times$ : Withdrawn, $\Delta$ : Participation Under Consideration) Source: Study Team

## 2-2.2 Turkmenistan

Turkmenistan is the sole country in Central Asia which is neither the member of EAEC nor is participant to SCO. However, President Berdimuhamedow of the country has been visiting SCO as a guest since 2007, attending ECO as a full member since 1992 and the summit meeting of ECO as a sub-member since 2009. The core target of the cooperation between Turkmenistan and ECO is the development of transport and communication network. One of the approaches is to start from the Golden Link among the Asian Cross Continent Railways which connects Tejen - Serahs - Mashad to be made as the foothold and through which the region will be connected to Persian Gulf and Arabian Sea. An opening ceremony for the connecting railroad has been done at the occasion of the $4^{\text {th }}$ Top Leader Conference of ECO at Ashgabat in May 1996. The project is in line with the 10 year action plan of ECO for the transport and communication sector and a part of the connecting line between Turkmenabat Atamurat - Ashgabat - Dashoguz is already in operation. An express road has been completed and in service for the section between Ashgabat and Dashoguz.

At the Top Leader Conference held at Caspian Sea of Iran in October 2007, Presidents of

Turkmenistan and Kazakhstan issued a joint statement which stipulates the construction of a railroad connecting Uzen of Kazakhstan to Gorgan of Iran through Kyzylkaya-Bereket-Etrek of Turkmenistan. The railroad is deemed to be an important component for developing the north and south transport corridor. The concept is in compliance with Turkmenistan's interest which focuses on the diversification of the routes for gas export by incorporating a gas pipeline to the development of the north and south transport network.

The projects above mentioned are construed to be the one implemented within the framework of ECO in accordance with the objectives of ECO rather than the one sponsored and executed by the assistance of ECO. Turkmenistan is providing its assistance to Afghanistan for developing its socio-economy which is assessed as one of the assistances ECO is providing for the stabilization of Afghanistan.

## 2-2.3 Kyrgyz Republic

While being a full member of EAEC, Kyrgyz Republic is yet to sign the customs union formed by Russia, Belarus and Kazakhstan. The country needs to clarify that its participation to WTO does not contradict with its participation to the customs union and the implication stemming from the prevailing status of being the center for import from China. Meticulous and sufficient preparation appears to be required for the country's entry to the customs union.

## 2-2.4 Tajikistan

Similar to Kyrgyz Republic, Tajikistan is yet to sign the customs union. In despite, the country is appealing for the measures of tiding over the current global financial crisis at the occasions of SCO and ECO. The country is putting priority upon the relation with Iran. At the occasion of the Top Leader Conference held in Tehran on March 11, 2009, the country has called for cooperation in establishing the free trade area and constructing the railroad linking China with Tajikistan. When President Ahmadinejad of Iran appealed for the creation of the common currency for ECO, establishment of ECO Bank, abolition of custom tariff within the region, Tajikistan responded in expressing its support for the establishment of ECO Bank.

## 2-3 Regional Cooperation Project/Program by Regional Cooperation Organizations

## 2-3.1 Central Asia Region as a Whole

Being viewed in the perspective of the regional cooperation organizations, the regional cooperation projects/programs of Eurasian Economic Community (EAEC), Shanghai Cooperation Organization (SCO), Economic Cooperation Organization (ECO) and Central Asia Regional Economic Cooperation (CAREC) resemble and overlap in their grand designs. Looking at the sectors covered by those regional cooperation organizations, the transport and energy which bear a particular importance not only for the Central Asian region as a whole but also for China, Russia and South Asia including Afghanistan are identified as the priority agenda by the frameworks of SCO, ECO, CACO and CAREC. By the same token, the trade is also prioritized by the three organizations of SCO, ECO and CAREC. In furtherance, plural numbers of regional cooperation organizations are recognizing the same topics as the priority ones in such as; the environmental protection is identified by SCO and ECO; the custom system by CAREC and EAEC; and the security and peace by SCO and CSTO.

However, with exception of CAREC which is supported by the institutions such as ADB and others for providing financial sources and thereby maintains a well defined program incorporating implementable projects, the number of cases in which the organizations have reached to the stage of implementing actual projects is limited.

Table2-10 Sector-wise Scope of Activities of Regional Cooperation Organizations

|  | SCO | ECO | CAREC | EAEC |
| :--- | :---: | :---: | :---: | :---: |
| Transport | O | O | O | O |
| Trades | O | O | O |  |
| Energy | O | O | O | O |
| Environment | O | O |  |  |
| Custom Duties |  |  | O | O |
| Tourism | O |  |  |  |
| Water |  |  |  | O |
| Peace and Order | O |  |  | O |
| Agriculture |  | O |  |  |
| Foods |  |  |  | O |

Source: ADB, "Central Asia Regional Cooperation Strategy and Program Update 2006-2008", p.17, Appendix 2

## - EAEC

While both EAEC and ECO are targeting to establish a common market, it is not clearly known which one the Central Asian countries will join between the two as it belongs to both organizations. Similarly, while both of the organizations are soliciting the vision of a common currency, they have not followed up with concretizing the concept as to what kind of approach would be taken and what would be the time schedule for the introduction of the common currency.

At the Interstate Council attended by the Top Level Leaders of EAEC held in June 2005, Russia and Kazakhstan proposed to establish an investment bank for the community and such proposal was supported by the member countries. In middle of June 2007, the General Secretary of EAEC, Mr. Rapota revealed that candidate projects had been proposed and reviewed in the fields of; bio-technology, a common energy market, a pilot project of transport network development connecting the borders of China and Kazakhstan to the borders of Belarus and Poland. At the Top Leader Conference of EAEC held at Kremlin on February 4, 2009, it has been resolved that EAEC would establish an Emergency Fund with the total funds of US\$ 10 billion for the purpose of meeting the financial and economic crisis. Russia committed to contribute US\$ 7.5 billion and Kazakhstan for US $\$ 1.0$ billion for the Fund.

- SCO

In comparison with the regional cooperation organizations such as EAEC and CAREC, SCO is inclined to be a military alliance. Yet, it is intensifying its involvement in the socio-economic aspects as has been endorsed by the commitment of China for providing a buyers' credit of US $\$ 900$ million at the occasion of the Top Leader Conference of SCO in June 2004. In March

2009, a special meeting was held to discuss Afghanistan in which the subjects of terrorism, drug trafficking and international organized crime. The meeting has resolved that the member countries will contribute to the stabilization of the peace and order in Afghanistan by extending bilateral assistances for; the development of road and communication network and energy related facilities; humanitarian aids such as hospitals and schools; the reconstruction of the country's socio-economy. As of the date, neither program nor project has been announced for its implementation.

## - CAREC

Central Asia Regional Economic Cooperation (CAREC) is targeting to promote the transport, energy and trades. The member countries used to suffer from the transitional crises that lasted until the middle of 1990s and are faced with the negative legacy of insufficient maintenance of transport infrastructure such as roads. The countries are plagued with the weaknesses embodied in the facts such as; weakness in the border control; inconsistent transport rules among countries; regional transport network failing to meet the contemporary demands; inefficient railroads lacking the competitiveness; insufficiency of regional aviation system; capacity development of human resources in the transport sector; etc. CAREC has developed Transport Sector Road Map (2005-2010) to address the issues and placed its priority in coordinating the member nations for the sector's development, while recognizing the development as an important step for facilitation of trades. CAREC has identified the four transport corridors numbered I through IV in which Kyrgyz Republic and Turkmenistan are on the east - west corridor whereas Tajikistan is primarily on the north - south and Uzbekistan is on both east - west and north - south corridors.


Source: ADB, "Central Asia Regional Cooperation Strategy and Program Update 2006-2008", p.15, Appendix 1

Figure 2-4 Core Programs of CAREC (2005-2008)


Source: ADB website (http://www.adb.org/Carec/transportation.asp as of May 2009)

Figure 2-5 Assistance by CAREC on Transport Sector


Source: ADB website ( http://www.adb.org/Carec/transportation.asp as of May 2009)

Figure 2-6 Road and Railroad Network in CAREC Member Countries


Source: ADB website (http://www.adb.org/Carec/transportation.asp as of May 2009)
Figure 2-7 Transport Network in CAREC

## 2-3.2 Turkmenistan

CAREC is extending assistances to the several projects of human resource development including a technical assistance to NGOs engaged in environmental protection works.

## 2-3.3 Kyrgyz Republic

As a part of the CAREC's strategy for promotion of the transport and trades, ADB plans to connect Bishkek with a road to Kashgar in Xinjiang Uyghur Autonomous Province of China through Narin Province of Kyrgyz Republic. This is one of the roads to be constructed under CAREC Corridors Project connecting Kyrgyz Republic with Torugart in Xinjiang Uyghur Province of China and is on the first stage of implementation of the total project. The project is comprised of pavement of the road and construction of a bridge and development of the custom's facility for the purpose of reducing the transportation cost and thereby promoting the trades and tourism in and between Kyrgyz Republic and China.

## 2-3.4 Tajikistan

In orchestration with the transport strategy of CAREC, ADB plans to rehabilitate the road for the distance of 66 km connecting the capital city Dushanbe with the border of Uzbekistan passing through Tursunzoda. The project intends to develop the infrastructure at the border of Bratsvo and to complete the CAREC Corridor III which remains partially interrupted now. The feasibility for the project is being prepared.

## 2-3.5 Assistances to Afghanistan by Regional Cooperation Organizations <br> - SCO

The activity area of SCO is gradually expanding. At an early occasion of Almaty Meeting in 1998 when the Organization was still called as Shanghai Five, the topic of economic cooperation used to be proposed as one of its agenda. SCO inscribes in its Charter the promotion of economic cooperation as its target ever since its inauguration and it keeps discussing on the cooperation in the fields of development of energy, infrastructure and international transportation. SCO lately shows its interests in the cooperation over energy, Afghanistan issue, global financial crisis, etc. in endorsement of its raison d'etre. SCO is convening its Top Leader Conference once every year on rotation basis. As one of such annual events, the Top Leader Conference held at Bishkek in August 2007, President Karzai of Afghanistan and President Berdimuhamedow of Turkmenistan were invited as special guests drawing world's attention to the Conference.

On March 27, 2009, Special International Meeting for Afghanistan Issues was convened in Moscow. Attended to the meeting were 30 countries and international organizations including the member and observer countries of SCO, U.S.A., United Nations, European Union (EU), North Atlantic Treaty Organization (NATO) and CIS. It is an epoch-making event that the western countries of U.S. and organizations such as NATO and UN participated in the Conference organized by SCO (quoted from "China International Broadcasting, Japan Division" dated March 28, 2009). It is presumably understood that SCO intends to retain and impress its influential position over the Afghanistan issue in view of the change in administration and inauguration of President Obama in U.S.A. by expressing its interest in Afghanistan issue. Specific details for involvement do not seem to be agreed and established among the member nations at SCO.

- ECO

ECO used to find political significance in demonstrating its unity among the member nations rather than exemplifying the achievements in the economic cooperation and construction. While the governments of Afghanistan and Central Asia have been inward looking due to the
domestic war and uprising of Taliban in Afghanistan and weak government organization and confusion of open market economy in Central Asia affected the progress of development project in the region. While ECO is interested in connecting Central Asian region in between its north and south by road network, the materialization of such project requires the political stability in Afghanistan as a pre-requisite and indispensable condition. In other words, once the Afghanistan issues are resolved, its role playing for the development of the member countries would potentially gain more importance. While Afghanistan is the member country of ECO, ECO occupies a geographically strategic position of importance, in particular, as the critical point where the north - south route of Eurasian Continent is to be cut open. As has been demonstrated in the Top Leader Conference mentioned above, the Organization is seen to be taking a proactive involvement for the reconstruction of Afghanistan.

## - CAREC

Afghanistan joined ADB who is the sponsoring institution of CAREC in 1966. The objective of CAREC in extending assistances to Afghanistan is found to be; establishing the framework for the reconstruction of a sovereign nation in the areas of policy making and administrative system and developing the infrastructure. As a part of the CAREC activities, ADB mobilized and disbursed the Asian Development Fund (ADF) for the amount of US\$ 200 million during 2005 through 2008 in grant assistance.

Table2-11 CAREC Projects for Assistance to Afghanistan

| Year | Project | Size of Assistance |
| :---: | :--- | :--- |
| 2006 | North-South Corridor Road Improvement Project | US\$ 138 million |
| 2006 | Strengthening Power Supply Project | US\$ 56.5 million: simultaneous <br> assistance with Tajikistan |
| 2007 | Road Network Phase 3 | US\$ 1 million |
| 2007 | Capacity Building for the Ministry of Public Works | US\$ 0.8 million |

Source: ADB website (http://www.adb.org/Carec/priority.asp as of June 2009)

## 2-4 Roles and Policies of Donors for Regional Cooperation Organizations

The donors who are active in Central Asia are; U.S.A., Germany, Switzerland, Turkey, Japan, China and Russia as the bilateral donors; and World Bank (WB), ADB, EC as the multilateral institutions. There exists no document that officially conveys the donors’ policies and roles towards the Central Asian Regional Cooperation Organizations. The most of the bilateral donors are assumed to be extending assistances in accordance with strategic reasons peculiar to each donor nation and from those reasons the assistances are extended directly to the recipient countries in their large part. The execution of large projects, however, are frequently seen assisted through a joint financing with international financial institutions such as World Bank, ADB, EBRD, etc. To the contrary, China and Russia are playing pivotal roles at regional cooperation organizations in Central Asia through their membership participation and are assumed to be extending assistances not only on the bilateral basis but through the regional cooperation organizations in accordance with their own interests. The multilateral donor institutions do not maintain direct cooperating relation with the regional cooperation organizations with exception of CAREC because most of those regional cooperation organizations are either politically or militarily oriented.

## 2-4.1 Policies and Strategies of International Development Financial Institutions

## 2-4.1.1 Financial Assistances by International Development Financial Institutions

The financial assistances extended during 2003 and 2007 by the World Bank and ADB reveal that an overwhelming part of the assistances have been given to Kyrgyz Republic and Tajikistan whereas Kazakhstan and Turkmenistan which are endowed with the natural resources of oil and gas have received smaller assistances. As will be addressed later, Turkmenistan remains reluctant in receiving loans but prefers to receive direct investment and such attitude is understood to have limited the financial assistance to; zero from ADB; and a very limited amount from the World Bank in 1990s. On the other hand, EC is seen to have provided assistances to the four countries other than Turkmenistan with at an equal amount while maintaining a stabilized level of activities to Turkmenistan.

Table2-12 Assistances Provided to Central Asian Countries by International Institutions (2003-2007)

| (Unit: Commitment Basis in US\$ million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2004 | 2005 | 2006 | 2007 |
| Kazakhstan |  |  |  |  |  |
| WB/IDA | 5.3 | - | - | - | - |
| ADB/ADF | - | - | 5.0 | - | - |
| EC | 1.7 | 11.8 | 16.1 | 15.4 | 26.1 |
| Uzbekistan |  |  |  |  |  |
| WB/IDA | 25.0 | 40.0 | - | 15.0 | - |
| ADB/ADF | - | - | - | - | 56.5 |
| EC | 0.4 | 13.7 | 11.5 | 10.9 | 0.1 |
| Turkmenistan |  |  |  |  |  |
| WB/IDA | - | - | - | - | - |
| ADB/ADF | - | - | - | - | - |
| EC | 1.1 | 2.7 | 7.1 | 4.4 | 8.2 |
| Kyrgyz Republic |  |  |  |  |  |
| WB/IDA | 42.9 | 54.0 | 15.0 | 43.0 | 16.0 |
| ADB/ADF | - | 17.0 | 10.8 | 16.2 | 16.7 |
| EC | 0.6 | 8.1 | 30.8 | 21.4 | 18.6 |
| Tajikistan |  |  |  |  |  |
| WB/IDA | 20.0 | 10.8 | 51.0 | 41.0 | 25.0 |
| ADB/ADF | - | - | - | - | - |
| EC | 31.9 | 35.3 | 50.2 | 38.5 | 31.5 |

Source: Information taken and processed from website of OECD, "Statistical Database"
(http://stats.oecd.org/) as of May 2009 and website of EBRD (http://www.ebrd.com/) as of May 2009

The breakdown of the assistances by sector reveals that; the assistances are primarily directed to the social sector and to the production sector with an exceptional case in which Tajikistan received a huge amount for the economic infrastructure. Further to be noted is the assistance provided to Tajikistan by EU for "others" category which contains humanitarian and material aids.

Table2-13 Sector- wise Assistances Provided to Central Asian Countries by International Institutions (2003-2007)

|  | Economic Infrastructure | Social <br> Infrastructure | Production Sector | Multi Sector | Others |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kazakhstan |  |  |  |  |  |
| WB/IDA | - | - | 5.3 | - | - |
| ADB/ADF | - | - | - | - | 5.0 |
| EC | 8.4 | 57.6 | - | 4.7 | 0.4 |
| Uzbekistan |  |  |  |  |  |
| WB/IDA | - | 55.0 | 25.0 | - | - |
| ADB/ADF | 0.1 | 27.3 | 29.2 | - | - |
| EC | - | 33.4 | 1.6 | - | 1.5 |
| Turkmenistan |  |  |  |  |  |
| WB/IDA | - | - | - | - | - |
| ADB/ADF | - | - | - | - | - |
| EC | 2.3 | 15.6 | 1.2 | 4.4 | - |
| Kyrgyz Republic |  |  |  |  |  |
| WB/IDA | 13.1 | 66.7 | 46.4 | 24.8 | 20.0 |
| ADB/ADF | 16.2 | 22.4 | 15.7 | - | 5.4 |
| EC | - | 38.5 | 2.2 | - | 38.8 |
| Tajikistan |  |  |  |  |  |
| WB/IDA | 18.0 | 59.3 | 50.1 | 0.4 | 20.0 |
| ADB/ADF | 158.1 | 31.2 | 52.2 | 22.7 | - |
| EC | - | 54.3 | - | 11.9 | 121.3 |

Source: Information taken and processed from website of OECD, "Statistical Database"
(http://stats.oecd.org/) as of May 2009 and website of EBRD (http://www.ebrd.com/) as of May 2009

## 2-4.1.2 Assistance Policies of International Development Financial Institutions

- World Bank (WB)

WB has extended financial assistances to Central Asia and European region for US\$ 3.62 billion in loan (IBRD), US\$ 230 million in IDA term funds and US\$ 25 million in grant funds whose aggregated sum amounts to US\$ 3.84 billion ${ }^{22}$.

WB evaluates the region to the effect that the region as a whole achieved a substantial extent of growth since 1990 but has been affected by the impacts of the world economic crisis of late and is exposed to a vulnerability of its economy. Given such circumstances, the Bank focuses on the emergency measures in stabilizing the financial sector through the fiscal assistance, analytical help of the banking sector, and reform and recapitalization, etc.

Towards Kyrgyz Republic and Tajikistan which are confronted with the shortage of foods and energy, the Bank intends to provide emergency assistances. In addition, the Bank conducts review of their social safety network system country by country and continues assistances for the protection of socially handicapped.

[^50]Incidentally, no country assistance strategy has ever been compiled by the Bank for Central Asian region.

## - Asian Development Bank (ADB)

ADB has provided Central and Western Asia with the approximate amount of US\$ 3 billion in 2007 which is tantamount to twice as much of the average amount of assistance between 2002 through 2006 which was found to be approximately US\$ 1.5 billion.

ADB's assistances to the Central Asian region as a whole are executed primarily through CAREC.

The objective of the Bank's regional economic cooperation is the enhancement of the welfare and poverty alleviation in member countries. As a means to achieve the objective, it intends to materialize a sustainable economic growth. To be specific, the Bank identifies the four long term targets of; 1) securing the accession to the export markets; 2) reducing the transportation cost within the region; 3) improving the energy supply to support the sustainable growth; 4) preventing the negative turnaround in the region and is carrying out its activities accordingly. The conceptual image of the assistance is as described in the Figure 2-7which has been drafted and approved in 2004 and remains valid as of the date.


Source: ADB, "Building Partnerships for Development: Regional Cooperation Strategy and Program, 2004-2006", (2006)

Figure 2-8 Framework of Regional Cooperation by CAREC

## - European Bank for Reconstruction and Development (EBRD)

The annual report of EBRD for 2008 stipulates the Bank's plan to expand its scale of investment to the 30 target countries including Central Asia up to Euro 7 billion during 2009 in order to provide the recipient countries with the countermeasures for coping with the global economic crisis. The amount means an increase of $33 \%$ from the level of 2008 . The incremental portion of the budget will primarily directed towards the financial sectors of the recipients while the priority sectors for 2009 are identified as the banks and private enterprises suffering from the impacts of the economic crisis and the development of energy and infrastructure.

Table2-14 Priority Sectors and Policy of EBRD for the Year 2009

| Sector | Assistance Policy |
| :--- | :--- |
| Banks | To provide financial institutions severely affected by the economic crisis with <br> the necessary funds through equity participation and loan. |
| Enterprises | To support private enterprises through provision of liquid assets and loans |
| Energy and Infrastructure | To support the development of the energy and infrastructure including a large <br> scale of projects. |
| Trades | To provide the doubled amount of fiscal assistances to the foreign trades for <br> preventing the economy to shrink in its scale. |

Source: European Bank for Reconstruction and Development, "EBRD Annual Report 2008"

## 2-4.2 Other Donors

## 2-4.2.1 China

As stated earlier, the donors of China, ADB, EBRD, IMF, IDB, UNDP and the World Bank are the participating member of CAREC and their assistances to the member countries are directed through CAREC. Not only the ADB which is hosting the secretariat of the Organization but also China is acting and intensifying its assistance to Central Asian countries through CAREC lately. China is acknowledged to be exerting its influential powers to the Central Asian countries in the fields of political, military and economic aspects through the activities at SCO.

Primary reasons for China to intensify the exertion of the influential powers to Central Asian countries are assumed to be; 1) securing the peace and order including the stabilization of its western region of the country; 2) securing and diversifying the source of energy and supply; 3) expanding the country's market.

## - Security and Peace

The security and peace issue in China has two facets; the first being the containment of the East Turkestan Independence Movement and the second being the maintenance of central Asia as the stabilized strategic front for the country.

Traditionally, the population migrate frequently between the western region of China, Xinjiang Uyghur Autonomous Province, and the Central Asian countries and due to such traditional fact, the stabilization of the regions are inter dependent on both sides. China is inclined to prevent the linkage from strengthening between the separatists in Xinjiang Uyghur Autonomous Province and Uyghuristan Communities existing in the countries such as Kazakhstan and Kyrgyz Republic. Lately, the counter terrorism became a wisely shared issue throughout the
world which China has taken advantage at $\mathrm{SCO}^{23}$ enshrining the containment of terrorism and separatists movements being the basic underlying theme of the Organization ${ }^{24}$ ．At the same time，China does not prefer the presence of a super power，namely U．S．A．in the Central Asian region for the sake of stabilizing its western region ${ }^{25}$ as is endorsed by the statement issued by China at the occasion of the Top Leader Conference of SCO in July 2005 to the effect that a long time stationing of U．S．military（in Central Asia）shall not be tolerated ${ }^{26}$ ．

## －Securing the Energy and Diversification of Supply Sources

Chinese economy is tracking a rapid growth and its consumption of oil has reached to 327 million tons in 2005 recording an increase of 3.7 times from that of 1980，out of which 67 million tons are imported．While China used to be an oil exporting country in the past，the country turns out to be the second largest oil importing country in the world．Should the economic growth continue at the same speed with that of the past，it is estimated that approximately $70 \%$ of the country＇s oil consumption will have to be imported in 2020．The presence of China in the energy markets of；Middle East，North Africa，West Africa，former Soviet Union countries is on the expanding trend ${ }^{27}$ ．Among the Central Asian countries，in particular，China appears to be looking for procuring the oil from Kazakhstan and the natural gas from Turkmenistan．

## 1）Expansion of Market

There exists an opinion that the size of market in Central Asian countries are not significantly large and poses to be unattractive in view of the small size of population from the Chinese perspective ${ }^{28}$ ．On the other hand，positive views are referring to its importance in； 1 ）securing a market for the goods produced in the western region of China；2）commanding of a wider perspective towards the European market lying beyond the Central Asia ${ }^{29}$ ．As a matter of fact， the Kyrgyz import from China is on the increasing trend and its bazaars and department stores are filled with Chinese products that have largely been manufactured in the western region of China．The railroad and road networks starting from China are heading towards Europe by passing through the Central Asia．Even shorter routes of networks are under planning for development．

China has pledged extension of assistances to the member countries of SCO at the occasion of its Top Leaser Conference of 2004 amounting US\＄ 900 million and at the Top Leader Conference of 2005 the establishment of a Special Fund for Human Resource Development．

[^51]
## 2－4．2．2 Russia

Russia used to establish and maintain a strategic presence in Central Asia during 1990s．But the diplomatic policy had not been clearly established and was in the gradual retreat from Central Asia economically．In 2000，however，the change of administration took place by the emergence of President Putin when coincidentally the presence of western European countries expanded their presence in the eastern Europe．Russia started appealing its presence in the former Soviet Union territory attempting to revive the status of super－power and such diplomatic stance of Russia has been strongly felt in the diplomatic maneuvering of Russian policy towards Central Asia．

The phenomenon of Russian revival to Central Asia is in the compounded nature．It does not remain within the political front but also cover a wider range of bilateral relationship including the military and strategic linkage taking advantage of its assistance for promoting the bilateral and／or regional cooperation．Take the debt reduction issues of Tajikistan and Kyrgyz Republic for example，Russia is negotiating the issues against the counter conditions of expansion of Russian military presence and increased activities of Russian enterprises in those countries．

The reasons of Russia＇s utilization of the regional cooperation in addition to the bilateral cooperation assumed to be stemming from the facts such as；1）Russia alone cannot manage the Central Asian countries；2）Russia has no political determination to do so；3）financial needs of Central Asia cannot be met accommodated by a single country ${ }^{30}$ ．In order to complement the circumstances，Russia has been determined to coordinate with China as its partner to share the responsibility in promoting the regional cooperation．Regional cooperation of Russia has been executed under the compounded objectives of political，economic，military and strategic objectives．With respect to EAEC，Russia appears to be considering of integrating the Organization with CSTO in future without keeping the Organization at the mere economic level alone．Nikolai Bordyusha，the Secretary General of CSTO has ever stated that CSTO and EAEC will look for to function in sharing the target of forming a common political，economic and military agenda ${ }^{31}$ ．

Aside from such，Russia has been pursuing the expansion of its military and economic influence through SCO．Russia is finding other significances in being the participating member of SCO in the perspective of；the stabilization of the border areas with Central Asia；development of the under－developed areas of Far East and Siberia；access to the Asian market ${ }^{32}$ ．From the Central Asian countries＇standpoint，the participation of Russia means to function as a restraint against the monopolization of SCO by China．It can be construed as playing the role of balancer in the overall context ${ }^{33}$ ．

[^52]Annex 3: Outline of the Development Strategy of Turkmenistan (Energy)


Annex 3: Outline of the Development Strategy of Turkmenistan (Transportation)

| Sector | Country-Level Development Goals | NDS Outcomes and Indicator (-2020) | Sub-sector | Challenges and Constraints | Measures / Projects |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transport system of the country in 2020 will provide one fifth of national income of Turkmenistan. | A construction and reconstruction of motor roads will be continued, new railway lines of domestic and international communication will be put into operation. | Road |  | 1 Reconstructed hard-surface road Serdar - Etrek Gudriolum <br> 2 Reconstructed hard-surface road Mary Serkhetabad <br> 3 Reconstructed hard-surface road Tejen - Serakhs <br> 4 Reconstructed hard-surface road Turkmenbashi Garabogaz - national boundary with Kazakhstan |
|  |  |  | Railway |  | 5 New railroad lines of international communication, Turkmen section of North - South Transport Corridor (from the Kazakhstan border to Turkmenbashi and from Bereket to Etrek) will be put into operation <br> 6 New railroad Ashgabat - Kara-Kum - Dashoguz will be constructed <br> 7 Railroad line Tejen - Babadayhan will be brought into service. |

Annex 3: Outline of the Development Strategy of Kyrgyz Republic (Energy)

| Country-Level Development Goals | CDS Outcomes and Indicator (2007-2010) | Challenges and Constraints | Measures / Projects |
| :---: | :---: | :---: | :---: |
| Financial rehabilitation, and a balanced and comprehensiv e development of the energy sector | Provision of reliable electricity to consumers that enhances potential for economic growth <br> - Improved collections <br> - Loss/theft reduction | Large investment needs with deteriorated assets <br> Electricity tariffs well below cost <br> Significant losses and theft, weak tariff collection <br> Low energy efficiency | 1 To develop and introduce rules of access to the network and sale of power from alternative energy sources and mechanisms of their financing. <br> 2 Completion of JSC "Kyrgyzgas" privatization. <br> 3 Transfer to concession or privatization of distribution companies. <br> 4 Capacity building of State committee on state property management. <br> 5 To develop and introduce incentive mechanism for energy company leadership based on merits and in connection to financial indicators of company activity. <br> 6 Improvement of Legislative and normative and legal acts regulating policy and sector performance, as well as stimulating of power saving. <br> 7 Completion of social protection reform on monetization of benefits for energy carriers. <br> 8 To develop and implement midterm tariff policy for heat and electrical energy and natural gas for the period till 2010. <br> 9 To introduce mechanism of transparent rate of export tariff. <br> 10 To fix power export functions to generating companies. <br> 11 To develop and start implementation of energy saving energy effectiveness programs, including and first of all for state institutions. <br> 12 To enhance financial discipline and control in energy sector. <br> 13 Putting into operation of additional generation capacities to increase export potential. |

Annex 3: Outline of the Development Strategy of Kyrgyz Republic (Energy)

| Country-Level Development Goals | CDS Outcomes and Indicator (2007-2010) | Challenges and Constraints | Measures / Projects |
| :---: | :---: | :---: | :---: |
|  |  |  | - Kambarata HES-1 (construction period 8 years) <br> - Kambarata HES-2 (construction period 4 years) <br> - Heating and power plant - 2 (construction period 3 years) <br> 14 Construction and putting into operation of new high voltage lines and substations to generate more power and improve the infrastructure for providing export of energy. <br> - High voltage line 500 Kambarata - Kemin <br> - High voltage line 220 and substation "Datka" 220 kV Kambarata - Kemin <br> - High voltage line 500 Kambarata - Kemin <br> 15 Reconstruction of existing generating capacities (Uchkurgan and At-Bashi HES, Heating and power plant - 1) <br> 16 To implement technical re-equipment and restoration of small HES. <br> 17 To implement complex of measures to cut down losses in energy system, first of all, in distribution network. <br> 18 To create conditions for the development and use of nontraditional renewable energy sources (NRES). |

Annex 3: Outline of the Development Strategy of Kyrgyz Republic (Transportation)

| Country-Level Development Goals | CDS Outcomes and Indicator (2007-2010) | Challenges and Constraints | Measures / Projects |
| :---: | :---: | :---: | :---: |
| A better transport infrastructure that provides access to local and regional markets | A road transport network that enhances access to markets and facilitates trade and transport in the CA region | Large investment needs <br> Deterioration of the road network, limited funding of operation and maintenance <br> Deteriorated urban public transport services <br> Barriers to cross-border transport links | 1 To optimize structure and composition of administrative and managerial personnel of road operation enterprises <br> 2 To provide support to technical condition of motor roads by means of prioritizing (road maintenance + routine repair). <br> 3 To develop feasibility study and detailed design for the rehabilitation of Issyk-Kul ring road. <br> 4 To provide supply of road building machinery. <br> 5 To develop design for the construction of by pass road along the boundaries of Tajik villages Chorku and Curkh. <br> 6 Rehabilitation of road Bishkek-Osh project stage 3 <br> 7 Rehabilitation of road Bishkek-Osh project (stage 2, package 2 equipment procurement) <br> 8 Rehabilitation of road Bishkek-Almaty (Georgievka) Project <br> 9 Rehabilitation of road southern transport corridor Project (ADB) <br> 10 To develop feasibility study and detailed design for the rehabilitation of Sarytash - Karamyk road. <br> 11 To develop supply of road-building machinery (about 7-8) TPACEKA. <br> 12 Rehabilitation of Talas - Taraz - Suusamyr road project (052km) 1 stage <br> 13 Rehabilitation of Talas - Taraz - Suusamyr road project (052km) 2 stage <br> 14 To develop project Rehabilitation of Bishkek - Torugart road with the length 539 km . <br> 15 Rehabilitation Osh - Batken - Isfana road Project <br> 16 To develop feasibility study for the construction of railroad line Uzbekistan - Kyrgyzstan - China. |

Annex 3-5

Annex 3: Outline of the Development Strategy of Kyrgyz Republic (Water Supply and Sanitation)


Annex 3: Outline of the Development Strategy of Tajikistan (Energy)

| Country-Level Development Goals | Sector tasks | PRS Outcomes and Indicator (2007-2009) | Measures / Projects |
| :---: | :---: | :---: | :---: |
| 1. Increase in the average daily availability of electricity from 16 hours to 20 hours | 1 Implementation of institutional reforms in the energy sector | Functions optimized and restructuring of the energy sector performed | 1 Perform a functional survey of agencies responsible for the development and implementation of policy in the energy sector |
|  |  |  | 2 Increase the potential of agencies responsible for the development and implementation of policy in the energy sector, including establishment of a system for monitoring the policy implementation |
|  |  |  | 3 Devise and implement a plan for the restructuring of Barki Tochik, which provides for the division of the company into generating, transmission and distribution units |
|  |  |  | 4 Devise and implement a plan for the restructuring of Tochikgas |
|  |  |  | 5 Develop a programme to protect vulnerable segments of the population in connection with higher rates for electricity and gas |
|  |  |  | 6 Devise a long-range conceptual framework for the development of the energy sector to 2025. Include in the plan the formation of industrialand water-energy complexes (clusters), regional energy consortiums, and a gradual transition to electricity supply in place of gas supply systems |
| 2.Reduction in the quasi-fiscal deficit | More effective use of available resources | 1. Decline in energy losses from 14\% to $10 \%$ <br> 2. Increase in electricity rates from 0.65 cents to 1.65 cents | 1 Implement a strategy aimed at a gradual increase in electricity rates in 2007-2010 |
|  |  |  | 2 Implement a programme to build small hydropower plans |
|  |  |  | 3 Implement and monitor an investment project to reduce energy losses |
|  |  |  | 4 Study opportunities for and promote investment projects involving the conversion of thermal electric power plants to coal (in addition to measures under the Water Supply sector) |
|  |  |  | 5 Promote an investment project to build coal-fired electric power plants |
|  | 3 Promotion of investment projects in the energy sector | Increase electricity generating capacities from 4070 megawatts to 6169.5 megawatts. Increase coal production from 98,800 tonnes to 148,100 tonnes, oil production from 16,000 tonnes to 29,300 tonnes and gas production from 23.8 million cubic metres to 30.5 million cubic metres. | 1 Implement the Development of the Regional Electricity Market project |
|  |  |  | 2 Perform an analysis and devise measures to reduce the energyintensiveness of production and household consumption (first stage) |
|  |  |  | 3 Improve the potential for electricity regulation at Barki Tochik |
|  |  |  | 4 Establish and ensure unconditional compliance with a schedule for heat, electricity and gas supply to consumers, especially during the winter months |

## Annex 3: Outline of the Development Strategy of Tajikistan (Energy)



## Annex 3: Outline of the Development Strategy of Tajikistan (Energy)



Annex 3: Outline of the Development Strategy of Tajikistan (Transportation)

| Country-Level Development Goals | Sector tasks | PRS Outcomes and Indicator (2007-2009) | Measures / Projects |
| :---: | :---: | :---: | :---: |
| Growth in freight turnover by 12.5\% Growth in passenger turnover by 4.7\% | 1 Implementation of institutional reforms in the transportation sector | Optimization of functions of government structures involved in the regulation of the transportation sector, adoption of a comprehensive strategy for development of the transportation sector | 1 Perform a functional survey of government agencies responsible for the development and implementation of transportation policy |
|  |  |  | 2 Increase the potential of central and local government agencies responsible for the development and implementation of transportation policy |
|  |  |  | 3 Organize monitoring and assessment of the transportation policy that is being implemented (as part of measure 1.1.2 |
|  |  |  | 4 Grant the Association of International Carriers independent status |
|  |  |  | 5 Provide incentives for the establishment of private transportation and expediting companies |
|  |  |  | 6 Increase the number of foreign air carriers operating in Tajikistan |
|  | 2 More effective use of available resources in the transportation sector | Key directions identified for optimal activities involving transportation facilities | 1 Perform an inventory (certification) of existing roads and transportation routes. Define in specific terms rights and responsibilities related to the operation and maintenance of roadways |
|  |  |  | 2 Perform an analysis of the financial stability of the highway system, including parking zones, new roads and tunnels |
|  |  |  | 3 Prepare and approve a strategic plan for the restructuring of Tajik Railway |
|  |  |  | 4 Prepare and approve a strategic plan for the restructuring of Tajik Air SUAE |
|  |  |  | 5 Modernize the financial management system of Tajik Air SUAE; modernize the airline ticketing system |
|  | 3 Promote existing and new investment projects in the transportation sector | Increase the number of roadways in satisfactory condition as a proportion of the total length of roadways to 7.2\% | 1 Implement the Shagon-Zigar highway construction project, phase 2 |
|  |  |  | 2 Implement the Pyandzh River bridge construction project |
|  |  | Attract US\$192 million in investments for the implementation of transportation projects | 3 Implement the Dusti-Lower Pyandzh highway construction project |

## Annex 3: Outline of the Development Strategy of Tajikistan (Transportation)

| Country-Level Development Goals | Sector tasks | PRS Outcomes and Indicator (2007-2009) | Measures / Projects |
| :---: | :---: | :---: | :---: |
|  |  |  | 4 Restore the Dushanbe-Aini-Shakhristan-Istravshan-Khudjand- Buston-Uzbekistan border highway |
|  |  |  | 5 Promote the Shar-shar tunnel construction project (US\$34.3 million) |
|  |  |  | 6 Promote the Chormagzak tunnel construction project (US\$51 million) |
|  |  |  | 7 Implement the Dushanbe-Kyrgyzstan border highway construction project, phase 1 |
|  |  |  | 8 Implement the Dushanbe-Kyrgyzstan border highway construction project, phase 2 |
|  |  |  | 9 Develop and implement methods to select the most important investment projects |
|  |  |  | 10 Promote a project to convert motor vehicles to alternative energy sources |
|  |  |  | 11 Promote investment projects to increase the fleet of freight cars (600 units) (FDI) |
|  |  |  | 12 Promote investment projects to carry out major repairs on 142 km of railroad tracks and lay 135 km of communications lines, phase 1 (FDI) |
|  |  |  | 13 Promote investment projects to electrify the Bekabad-Kanibadam railway route |
|  |  |  | 14 Promote investment projects to build the Kokhozabad-Lower Pyandzh railroad, phase 1 (FDI) |
|  |  |  | 15 Implement railroad upgrading projects |
|  |  |  | 16 Develop and promote investment projects involving the restructuring of Tajik Air SUAE (in addition to 1.2.4) |
|  |  |  | 17 Promote investment projects involving reconstruction of the Khudzhand and Dushanbe airports (FDI) |
|  |  |  | 18 Promote investment projects to strengthen the potential of domestic airports |
|  |  |  | 19 Promote investment projects to develop structures for the handling of motor, rail and air freight (FDI) |

## Annex 3: Outline of the Development Strategy of Tajikistan (Transportation)

| Country-Level <br> Development Goals | Sector tasks | PRS Outcomes and Indicator <br> (2007-2009) | Measures / Projects |
| :--- | :--- | :--- | :--- |
|  |  | 20 Promote an investment project to modernize the Tajik Air aircraft <br> fleet (FDI) |  |

Annex 3: Outline of the Development Strategy of Tajikistan (Water Supply and Sanitation)

| Country-Level Development Goals | Sector tasks | PRS Outcomes and Indicator (2007-2009) | Measures / Projects |
| :---: | :---: | :---: | :---: |
| Provide access by the end of 2009: <br> 1 . to drinking water that meets state standards for 96\% of the country's urban population and $51 \%$ of the rural population; <br> 2 . to basic sanitation and hygiene conditions for $47 \%$ of the country's urban population and $37 \%$ of the rural population. Increase in the proportion of household who | 1 Institutional reform of the sector |  | 1 Perform a functional and institutional survey of the sector |
|  |  |  | 2 Increase the potential of agencies responsible for the development and implementation of policy related to water supply, sanitation and housing and municipal services |
|  |  |  | 3 Draft and adopt a law on drinking water and water supply |
|  |  |  | 4 Draft and adopt a law on homeowner partnerships |
|  |  |  | 5 Prepare a new version of the Housing Code |
|  |  |  | 6 Prepare sanitary regulations and norms for drinking water |
|  |  |  | 7 Implement the first stage of the Programme to Improve the Drinking Water Supply in the Republic of Tajikistan for 2007-2020 |
|  |  |  | 8 Provide a stable electricity supply for water delivery systems, supply electrical power and hydro-mechanical equipment to the towns of Kurgan-Tyube, Kulyab and Kanibadam |
|  |  |  | 9 Introduce a system for the effective tracking of drinking water consumption |
|  |  |  | 10 Prepare and implement a conceptual plan for the restoration and development of heating supply systems |
|  |  |  | 11 Prepare a conceptual plan for the development of housing |
|  |  |  | 12 Perform an analysis of existing rates for municipal services and the collection rate for municipal services provided |
|  |  |  | 13 Provide for training and professional development of engineering and technical personnel in the housing and municipal services sector |
|  | 2 Involve private business and attract investments | 1. Establish a regulatory legal base for the water supply, sanitation and housing and municipal services sector | 1 Perform an analysis of the attractiveness of facilities from an investment standpoint and privatization |
|  |  |  | 2 Improve water supply management |
|  |  |  | 3 Enable private construction firms to lease equipment and tools necessary to improve the services provided and develop the infrastructure (FDI) |

Annex 3: Outline of the Development Strategy of Tajikistan (Water Supply and Sanitation)


Annex 3: Outline of the Development Strategy of Tajikistan (Water Supply and Sanitation)

| Country-Level Development Goals | Sector tasks | PRS Outcomes and Indicator (2007-2009) | Measures / Projects |
| :---: | :---: | :---: | :---: |
|  |  |  | 15 Provide protection of sanitary zones in the cities of Dushanbe, Khudzhand, Kurgan-Tyube, Tursun-Zade, Bokhtar Buston, Khamadoni, Kulyab, Kumsangir, Taboshar, Istravshan, Gissar, Vakhdat, Faizabad, Kharog, Aini, Todzhikitobod, Rudaki and Shakritus |
|  |  |  | 16 Install water meters |
|  |  |  | 17 Restore and rebuild the reservoir for daily regulation of water levels in the city of Dushanbe |
|  |  |  | 18 Restore and rebuild interior plumbing systems |
|  |  |  | 19 Restore and rebuild heating and water supply systems in the city of Khudzhand |
|  |  |  | 20 Restore and rebuild interior plumbing systems |
|  |  |  | Khochagii Manziliyu Kommunali state unitary enterprise <br> 21 Develop the municipal services infrastructure |
|  |  |  | 22 Develop the public utilities infrastructure in GBAO |
|  |  |  | 23 Restore and rebuild water supply systems in rural areas: Dzhilikul, Kumsangir, Vakhsh,Bokhtar |
|  |  |  | 24 Implement the Clean Water for Poor Rural Residents project |
|  |  |  | 25 Build new water supply systems in Bishkent, Shvartuz, Dzhilikul,Vakhsh, Kumsangir,Kalkhozbad,Dangara |
|  |  |  | 26 Implement a project to restore the water supply system in Zafarabad District |
|  |  |  | 27 Carry out the project to build the Dangara Group Water Supply |
|  |  |  | 28 Complete construction of the second stage of the sewage treatment facility in the city of Khudzhand |
|  |  |  | 29 Restore and rebuild the sewage treatment facility in the city of Dushanbe |

## Annex 3: Outline of the Development Strategy of Tajikistan (Water Supply and Sanitation)

| Country-Level Development Goals | Sector tasks | PRS Outcomes and Indicator (2007-2009) | Measures / Projects |
| :---: | :---: | :---: | :---: |
|  |  |  | 30 Rehabilitate the sewer systems in the towns and district centres of Kulyab, Kurgan-Tyube, Kumsangir, Shakhritus, B. Gafurov, Pendzhikent, Taboshar, Isfara, Istravshan, Rudaki, Tursunzoda, Gissar, Vakhdat, Faizabad, Khorog, and carry out new construction of sewage treatment facilities in Vose, Asht and Shakhrinav |
|  |  |  | 31 Restore city gas networks |
|  |  |  | 32 Bring condition of gas mains back up to regulatory standards |
|  |  |  | 33 Bring gas service to Matcha District |


[^0]:    ${ }^{1}$ This refers to ethnic groups that are associated with country names. For example, in Tajikistan, the Tajik race is a nominal ethnic group.

[^1]:    Source: EBRD, "Transition Report 2008", Country Assessments

[^2]:    ${ }^{1}$ According to Tajikistan's Committee on Investments and State Property, restructuring entails divisions, sale and transfer, and the formulation of a joint stock company.

[^3]:    ${ }^{2}$ In Kyrgyz, a district heating system by hot water supply is used. This was constructed in the Soviet era.

[^4]:    ${ }^{3}$ According to the Asian Development Bank, "Final Report-Vol.1: Power Rehabilitation Phase II" (2006) , as of the end of year 2005, the uncollected amount from TALCO was equivalent to Barki Tojik 's revenue for 6.5 months.

[^5]:    ${ }^{4} 1$ somoni $=100$ diram

[^6]:    ${ }^{5}$ World Bank, "Migration and Remittances: Eastern Europe and the Former Soviet Union", (2006)

[^7]:    ${ }^{6}$ World Bank, "Remittances in the CIS Countries: A Study of Selected Corridors", (2007)

[^8]:    ${ }^{7}$ Asian Development Bank, "A Study on International Migrants’ Remittances in Central Asia and South Caucasus: Country Report on Remittances of International Migrants and the Financial Sector in the Kyrgyz Republic" (Technical Assistance Consultant’s Report- Draft)

[^9]:    ${ }^{8}$ ADB, "A Study on International Migrants’ Remittances in Central Asia and South Caucasus: Country Report on Remittances of International Migrants in Tajikistan" (Technical Assistance Consultant’s Report- Draft), (2008)

[^10]:    ${ }^{9}$ International Monetary Fund, "Tajikistan: IMF Country Report No. 09/174", (June 2009)

[^11]:    ${ }^{10}$ Kumtor mine is planned to be closed during 2014~2015.

[^12]:    ${ }^{11}$ In Iran, it is considered that economic benefits are great if domestic demand is covered by imports from Turkmenistan and they export natural gas as LNG from the gulf coast. In December 2007, Turkmenistan discontinued the gas supply to Iran, and the northern part of Iran and Teheran became short of gas. Turkmenistan explained the reason for halting the gas supply as due to technical problems, but it was allegedly attributed to price problems as it was impossible to fix the pipeline because of unpaid past charges for gas. In March 2009, a swap agreement was signed between Gazprom of Russia and the national petroleum company of Iran. It was agreed that in stead of supplying natural gas and petroleum for gulf coast countries from the southern part of Iran, Gazprom would supply natural gas for the northern part of Iran from Turkmenistan.

[^13]:    12 JICA and MOFA「中央アジア地域の電力•水資源に関する地域連携に関する委託調査報告書」（2009）

[^14]:    ${ }^{13}$ Ministry of Energy and Industry of Turkmenistan，＂Power Industry：New Perspectives＂，p． 23

[^15]:    ${ }^{14}$ Investment Guide p. 67

[^16]:    ${ }^{15}$ The Ministry of Nature Protection of Turkmenistan website, (http://enrin.grida.no/htmls/turkmen/soe2/english/ecology/waters1.htm as of June 2009)

[^17]:    ${ }^{16}$ UNICEF Turkmenistan Office website (http://www.unicef.org/turkmenistan/water_sanitation.html as of June 2009)

[^18]:    ${ }^{17}$ World Bank，＂Central Asia Regional Electricity Export Potential Study＂，（2004）

[^19]:    Source: Ministry of Transport and Communication

[^20]:    ${ }^{18}$ Asian Development Bank, "Asian Development Outlook 2009", p. 148

[^21]:    Source: USAID Kyrgyz Office website (http://centralasia.usaid.gov/ as of June 2009)

[^22]:    ${ }^{19}$ Functional block provides for an appropriate institutional and functional environment for economic growth and improvement of social services and encompasses the following sectors: public administration reform; macroeconomic development; improvement of the investment climate; development of the private sector and entrepreneurship; regional cooperation and integration into the global economy.
    ${ }^{20}$ Production block is responsible for the physical environment to support economic growth and brings together the following sectors: food security and development of the agro-industrial complex, development of infrastructure, communications, energy, and industry.
    ${ }^{21}$ Social block provides for expansion of access to basic social services. It is comprised of the following sectors: development of the health care system; development of the education system and science; expansion of access to water supply, sanitation and housing and municipal services; improvement of social welfare; promotion of gender equality, and environment sustainability.

[^23]:    ${ }^{22}$ WB, "Project Appraisal Document on a Proposed Credit and Proposed Grant to the Republic of Tajikistan for the Energy Loss Reduction Project", (2005)

[^24]:    ${ }^{23}$ ADB, "Central Asia: Increasing Gains from Trade Through Regional Cooperation in Trade Policy, Transport, and Customs Transit", (2006)

[^25]:    ${ }^{24}$ Asian Development Bank, "Asian Development Outlook 2009", p. 150

[^26]:    25 IMF, "Republic of Tajikistan: Debt Sustainability Analysis Under the Debt Sustainability Framework for Low-Income Countries"
    ${ }^{26}$ IMF, "Republic of Tajikistan: Debt Sustainability Analysis Under the Debt Sustainability Framework for Low-Income Countries. Discussion on loan conditions is currently underway. The Tajikistan side expects the loan to be concessional.

[^27]:    ${ }^{27}$ This includes a loan from China for the construction of high-voltage transmission lines and loans from Russia and Iran for the construction of a hydropower station

[^28]:    ${ }^{28}$ It is reported that particularly in rural areas, prevailing poverty and the revival of discriminatory practices against women have resulted in a lower level of illiteracy and school enrollment ratio for girls. (UNDP Central Asia Human Development Report, 2005)
    ${ }^{29} \mathrm{http}: / /$ web.worldbank.org/external/projects/main?pagePK=64283627\&piPK=73230\&theSitePK=258744\&menu $\underline{\text { PK=287280\&Projectid=P089244 }}$
    ${ }^{30}$ Somonie villages are reported to be submerged. The villagers are to be relocated.
    ${ }^{31}$ According to WB documents, it is located in upstream of Nurek http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/04/25/000334955_2008042505 0355/Rendered/PDF/433330PJPR0P1117362B01off0use0only1.pdf

[^29]:    ${ }^{32}$ Nurek dam produces $70 \%$ of the total electricity of the country. The bank has provided a grant for a 500 KV switchyard.
    ${ }^{33}$ In 2006 transmission lines between Dushanbe and the Afghanistan border / Afghanistan to central Afghanistan were constructed for trading electricity. In 2008, at the SCO Summit in Dushanbe, a Purchase Agreement was signed between Tajikistan and Afghanistan (on 29 August 2008).
    ${ }^{34}$ As of the assessment mission of 2008, ADB Manila sent a F/F mission on a genetically modified cotton program. However, it is assumed that there will be no such assistance implemented although the ADB mission from Manila

[^30]:    ${ }^{35}$ Although these banks provide mid-term loans, the main transactionz of the banks are international remittances by the migrant workers from Tajikistan to Russia or Kazakhstan

[^31]:    ${ }^{36}$ http://www.swisscoop.tj/

[^32]:    ${ }^{1}$ The Bolsheviks were the left wing of the Russian Social Democratic Workers' Party, which was the predecessor of the Soviet Communist Party. Their leader was Lenin. In Russian, Bolshevik means "the majority."
    ${ }^{2}$ Joseph Stalin defined the word of "Nationarinosuchi" by ethnic language because it is difficult to determine a objective criteria. However, under the Soviet Union, the classification of ethnic groups were defined by political intention rather than by more accurate academic criteria.
    ${ }^{3}$ Oliver Roy, "Modern Central Asia" (2007), p. 29

[^33]:    ${ }^{4}$ For example, intervention into Afghanistan

[^34]:    ${ }^{5}$ This refers to ethnic groups that are associated with country names. For example, in Tajikistan, the Tajik race is a nominal ethnic group.

[^35]:    ${ }^{6}$ Termez was a transit point when the Soviet army invaded Afghanistan in December 1979. During the Soviet invasion, Uzbeks played important roles in the construction of irrigation facilities and so on in Afghanistan, and even today many Uzbeks are well-versed in the local conditions.

[^36]:    ${ }^{7}$ See Chapter 1, 1-3.2

[^37]:    ${ }^{8}$ Concrete prices and systems have not been disclosed.
    ${ }^{9}$ Refer to Chapter 1, 1.3-2, in terms of natural gas export from Turkmenistan to Iran.

[^38]:    ${ }^{10}$ Radio Free Press, April 14, 2009
    11 The name Nabucco comes from the opera of that name by Verdi and it represents one of the pipeline concepts currently being promoted by Europe.

[^39]:    12 Blue Stream is composed of three parts, running 222 miles from Izobilnoye in Russia to Dzhugba on the Black Sea coast, 235 miles under the Black Sea from Dzhugba to Samsun on the Turkey side, and 300 miles from Samsun to the Turkish capital Ankara.

[^40]:    ${ }^{13}$ See Chapter 1 for details.

[^41]:    14 The Jamestown Foundation, Eurasia Daily Monitor Volume:5, Issue:221
    15 Asia-Plus, Oct.29, 08
    ${ }^{16}$ Russia "Independence Newspaper," October 28, 2008

[^42]:    17 Turkmenistan joined as a sub-member in 2009.

[^43]:    Source: Study Mission based on available data

[^44]:    18 Russia, Ukraine, Belarus, Azerbaijan, Armenia, Kazakhstan, Kyrgyz Republic, Uzbekistan, Tajikistan, Turkmenistan and Moldavia

[^45]:    19 The organization is called GUAM now due to the withdrawal of Uzbekistan

[^46]:    20 The importance of the conference is evidently known by the fact that President Yeltsin of Russia attended all of its meetings despite the ailing condition during his last years of life.

[^47]:    21 *http://www.adb.org/Carec/programs.asp

[^48]:    Source: ADB website (http://www.adb.org/Carec/regional-pipeline-2006.asp as of June 2009)

[^49]:    Source: ADB website (http://www.adb.org/Carec/regional-pipeline-2006.asp as of June 2009)

[^50]:    22 World Bank website (http://www.worldbank.org/), Europe and Central Asia Overview (as of June 2009)

[^51]:    ${ }^{23}$ The statement of SCO for its war against the terrorism and the separatist movements was dated prior to the $9 \cdot 11$ incident but the＂counter terrorism＂adopted by many countries after the incident supported the SCO＇s statement as the tail wind．Russia and Central Asian countries are also faced with the separatists issue and the Islamic Extremists issue and share the sentiments on those issues．
    24 JETRO「中央アジアで拡大する中国のプレゼンス」（December 2007）
    ${ }^{25}$ China appears to be concerned of the eventuality that would result from the presence of U．S．A．in Central Asian region in such matters as；conducting a reconnaissance over Chinese territory；provoking the separatists in East Turkestan；controlling the transportation route of the oil and natural gas from Caspian Sea area；etc．（JETRO「中央 アジアで拡大する中国のプレゼンス」（December 2007）。
    ${ }^{26}$ The statement has no binding power upon the member countries．The statement was followed by an explanatory announcement which softened the overall tone of the statement taking into consideration of Kyrgyz government granted stationing of U．S．military force．
    27 ditto
    28 Ditto and based on the interview during the field survey．The ditto document describes the Chinese concepts of establishing the free trade area or united economic area are based on the country＇s interests for securing the energy resources on a long term basis．
    29 Interview during the field survey．

[^52]:    ${ }^{30}$ Marlene Laruelle，＂Russia＇s Central Asia Policy and the Role of Russian Nationalism＂，（2008）
    31 ditto
    32 猪股浩司，国際問題研究所ホームページ「コラム」（2006 年）
    33 清水学，大阪大学中国文化フォーラム（2006 年）

