



■ Upper: Mother with her child on a horse by their summer home, a yurt, in the alpine valley Tes Tur, a favored summer spot for many shepherds' families and their herds. Lower: Woman in traditional dress by the entrance of a yurt.

elcome is a popular word in the cities, towns, and villages of the Kyrgyz Republic, for hospitality in this mountainous country is a human resource that is never in short supply. A welcome hand is extended to the Kyrgyz storytellers (manaschi) who visit house to house. And it greets the weary traveler arriving from abroad. It is a welcome that reflects the spirit of congeniality that is pervasive among Kyrgyz people.

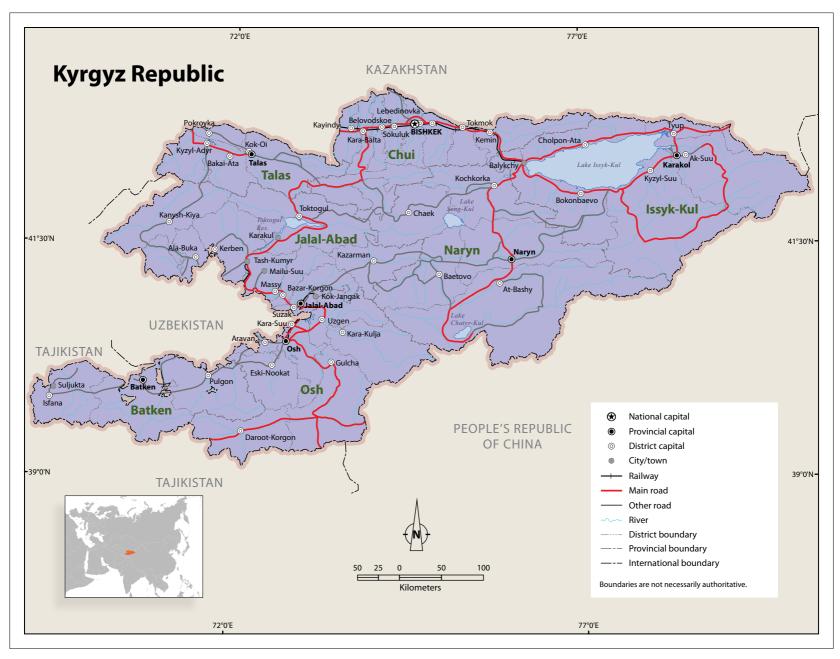
The Kyrgyz Republic is Central Asia's second smallest country, about 200,000 square kilometers in area. It is located in the southeast corner of the region, and is one of Central Asia's least geographically accessible countries. The Kyrgyz Republic shares borders with Kazakhstan to the north, the People's Republic of China to the west and south, Tajikistan to the south and east, and Uzbekistan to the west. It extends roughly 900 kilometers east to west and 400 kilometers north to south. Mountains cover 90% of the country, with more than half of this area rising higher than 2,500 meters above sea level.

Mountain ranges are heavily glaciated and include sections of the Pamir and Alatau, and a large portion of the Tien Shan, which dominates the country and divides it in two: a northern zone that includes the capital Bishkek and the Talas, Chui, and Issyk-Kul oblasts (provinces); and a southern zone comprising Jalal-Abad, Naryn, and Osh oblasts. Less than 10% of total land area is fit for crop agriculture and permanent settlement. This severely restricts land use and population distribution. In fact, most people are concentrated in the relatively flat Chui Valley along the Kazakhstan border in the north, and Fergana Valley in the south.

About two-thirds of the population are Kyrgyz, 14% Uzbek, 9% Russian, and about 1% each Dungan (ethnic Chinese Muslim), Ukrainian, and Uyghur, with a large array of smaller ethnic groups making up the remaining 6%. In spite of increased migration to the capital, Bishkek, about two-thirds of the people still live in rural areas. Kyrgyz is the country's official language; Russian is officially designated the second language and is the primary language of business and higher education.

Achieving Solid Goals

Since independence, the Kyrgyz Republic has undergone a difficult period of economic, social, and political transition. Reflecting this was the



2005 "Tulip Revolution," which ousted the country's long-time president, bringing a new one to power. Despite enduring political tension, the Kyrgyz Republic has been able to make progress, achieving macroeconomic stability. In the mid-1990s, to accelerate economic growth, the country began to pursue more liberal economic policies than its neighbors, liberalizing foreign trade and introducing broad systematic reforms to establish the platform for a market economy. This appears to have paid off because the country has enjoyed average yearly gross domestic product (GDP) growth of nearly 4.9% since 1996, capped by an impressive 8.2% GDP growth in 2007. Kyrgyz Republic's economic pillars are agriculture, hydropower, and mining. Agriculture accounts for roughly a third of GDP. Gold by itself accounted for 1.9% of GDP in 2003, most coming from the Kumtor mine—one of the world's largest gold mines. Things may be changing, however. Vibrant construction, services, and manufacturing sectors drove 2007 growth, suggesting greater diversification is taking place and a sign that the economy is maturing.

The country's record in achieving national Millennium Development Goals (MDGs), however, is somewhat mixed. Overall poverty has declined; however, regional disparities and inequality

have increased. Complicating poverty reduction have been labor migration and a "brain drain." Improvements in education are also questionable, for while enrollment rates in secondary school approach 95%, enrollment in primary education has declined, and negative trends in literacy rates among 14- to 24-year olds have been observed.

Available analyses also indicate challenges to achieving MDG targets for gender equality, maternal health, and infectious diseases, such as HIV/AIDS and tuberculosis.

A Biodiversity Hot Spot

Located in the middle of the Central Asian biodiversity "hot spot," the Kyrgyz Republic has a multitude of endemic species representing Himalayan flora and fauna biotypes. It is home to 1% of world species, including 3% of world fauna; contains diverse gene pools; and has eight principal biogeographical regions and 22 identified ecosystems. The widest variety of ecosystems is in the mountains at altitudes of 2,000–3,000 meters, while a few are found in the Fergana Valley and southern Kazakhstan biogeographical region. Several ecosystems are vitally important because of their rarity, such as



■ Edelweiss (Leontopodium alpinum) flowers near Altyn Arashan, located in an alpine valley south of Karakol. The area is famous for its hot and cold springs.









■ Top left: Reservoir on the Naryn River. Top right: Shepherds are as much at home on horseback as on their own two feet. Middle: Transforming sheep wool into shyrdak or felt carpets is not only a tradition very much alive today but also an important source of additional family income. Bottom: In a classroom in Karakol.

fruit and nut forests, and pistachio and almond forests. Others, including mountain meadows, canyons, river valleys, and lowland steppes, are important for the county's general resource base.

But these rich biological resources are under threat. Misuse of land and water resources is at the heart of the problem. As a member of the former Soviet Union, the country specialized in agriculture and mineral production. Infrastructure for irrigation and mineral processing were built accordingly. The end of collectivized agriculture and decline of the mineral processing industry revealed to the new nation how much its predominantly rural population depends on resources in their more natural state.

For example, the agriculture sector is the country's largest employer, providing more than 50% of employment between 2000 and 2005, and involves most of the rural population, the segment comprising the majority of the country's poor. Farm productivity, however, is held back by the natural constraints of a rugged mountain country and agricultural practices that continue to degrade land. Waterlogging, salinization, and pollution from agricultural chemicals affect irrigated land. Soil erosion on sloping lands affects dryland agriculture. Overgrazing depletes land and causes erosion, while deforestation to create farmland and supply fuel has drastically reduced fir and juniper, and fruit and nut forests. Better management practices for irrigation, croplands, rangelands, and forests would result in significant economic benefits. To ensure its sustainable future, Kyrgyz Republic's biota needs protection.

To its credit, the country has had modest success in rehabilitating some irrigated areas damaged by salinity and waterlogging, and has expanded its area of national parks to protect biodiversity. Moreover, the Kyrgyz Republic encouraged the United Nations to declare 2002 the International Year of Mountains. At the associated Global Mountain Summit in Bishkek that same year, the Kyrgyz Republic presented a National Strategy and Action Plan for Sustainable Mountain Areas to serve as a country model for the region.

Tapping the Country's Water Potential

Although Kyrgyz Republic's mineral sector is an export leader, its immense water resources may hold the country's greatest revenue potential for the future. Abundant mountain precipitation combined with glacial and snow melt give rise to some 25,000 rivers and streams. There are about 70 major rivers, including the Chui and Talas, which flow northwest into Kazakhstan, and Naryn, which meets the Kara Darya to form the Syr Darya in Uzbekistan. The total length of all these rivers and streams is about 500,000 kilometers.

Hydroelectricity provides the Kyrgyz Republic with more than four-fifths of its electrical energy, yet current water withdrawals use but a small percentage of available water capacity. One facility that taps water resources is the Soviet-built Toktogul Reservoir, which regulates the Naryn River for irrigation and hydropower. In progress are two Kambarata hydropower stations on the Naryn and a series of stations on the Sary Djaz River; other stations are in the planning stage. And plans are also in the works to make hydropower a sustainable source of revenue by constructing electrical networks to export electricity beyond the region.

To use water resources properly, however, more integrated water management both within the country and across national borders is essential. This is because lacking hydrocarbon energy sources, the Kyrgyz Republic—like its water-rich neighbor Tajikistan—releases vast amounts of water in the winter to meet energy needs. These untimely releases cause floods, degrading downstream lands, and reduce water reserves essential for seasonal irrigation in Kazakhstan and Uzbekistan. Mutual action by all countries interested in using the region's waters is needed to adopt better water management and to create enforceable agreements that are respected by all.





Making the Most of Its Resources

Natural resources will likely remain the primary source of livelihood for most Kyrgyz Republic's people for years to come. Preventing and mitigating environmental risks, therefore, will remain key. In promising sectors such as agroprocessing, energy development, mining, and tourism, environmental safeguards and natural resources management should be strengthened. Improvements in managing state-owned land, including pastureland, as well as the majority of croplands transferred to private ownership in 1998, should also be made. Likewise, support for sustainable development for irrigation infrastructure must be maintained.

Regarding agricultural efficiency, reductions in the country's incidence of rural poverty in the early 2000s were largely attributable to improved agricultural performance and rising wages. This suggests that more efficient agricultural practices could result in substantial gains in productivity, lifting more rural poor out of poverty. Because it has fewer natural resources and a much smaller domestic market than its neighbors, the country will also need to maintain its attractive investment climate and place emphasis on developing more highly educated human resources.

■ The alpine plateau, located at 3,016 meters above sea level, is a favored summer home for many shepherd families and their herd, where they live for half the year in traditional yurts.

Bishkek

yrgyz Republic's capital, Bishkek, is reputed to be the greenest city in Central Asia. And few could argue. Its numerous parks, wide boulevards, and grid-patterned streets feature countless trees that offer welcome shade on even the hottest summer day. The city is located in the central Chui Valley, in the foothills of the snowcapped Kyrgyz Alatau range, which picturesquely paint its southern skyline. Home to about 837,000 people, Bishkek is the country's largest city.

The site on which Bishkek now stands has history that traces back to the 6th century, when it was a caravan rest stop on the great Silk Road. In 1825, the Khan of Kokand built a fortress there, which was captured in 1862 by invading Russians. A small town named Pishpek (the Kazakh word for the pole used in the churn to make the traditional and medicinal drink of mare's milk called *kymys*) grew on the site. Under Soviet occupation, the town—renamed Frunze—grew to become the republic's most important city. When the Kyrgyz Republic declared its independence in 1991, the city was renamed Bishkek.

In many ways, Bishkek still retains its Russian feel, with Soviet-era buildings and gardens dominating newer architecture. As Bishkek modernizes, however, an exciting vitality is emerging. Foreign cars and minibuses crowd busy city streets. Restaurants, cafes, and shops have popped up everywhere. As Kyrgyz Republic's economic and cultural center, the city has much to offer. The State Museum of Applied Arts contains marvelous examples of Kyrgyz traditional handicrafts. Ala-Too Square in the city center is a gathering place for state events and celebrations. Supermarkets and open markets laden with fresh fruits and vegetables are popular. And busy Dordoy Bazaar, which stretches for more than a kilometer, is one of Central Asia's greatest marketplaces, serving as an entrepôt for local wares as well as for goods from the People's Republic of China, the Russian Federation, Thailand, Turkey, and many other Asian nations.

Tourism has also taken hold, with Bishkek becoming the jump-off point to nearby Lake Issyk-Kul, the world's highest and largest glacier lake. But perhaps most exciting of all is a revival in Kyrgyz culture, which has revitalized Bishkek's theaters, art museums, and even its streets with a spirit of national identity and pride.

■ Views of Bishkek. The panorama is the Ala-Too Square, the main city square.





