

Tajikistan

Proud Mountain Nation



■ **Upper:** Yaks grazing near the village of Tokhtamysh in the Aksu Valley in the Pamir mountains. **Lower:** A young boy riding his donkey carries firewood along the banks of the Vakhsh River in Sangtuda.

Scenically spectacular, culturally rich, and emergent from a difficult post-Soviet transformation are apt ways to describe Tajikistan. A ride along the Pamir Highway takes a visitor through high-altitude terrain as scenic as anywhere on the planet. The Persian-rooted Tajik language, distinct from the Turkic ones of the rest of the region, bespeaks the nation's cultural diversity. Independence, civil war, and consolidation mark the transformative steps Tajikistan has taken to evolve into a proud nation.

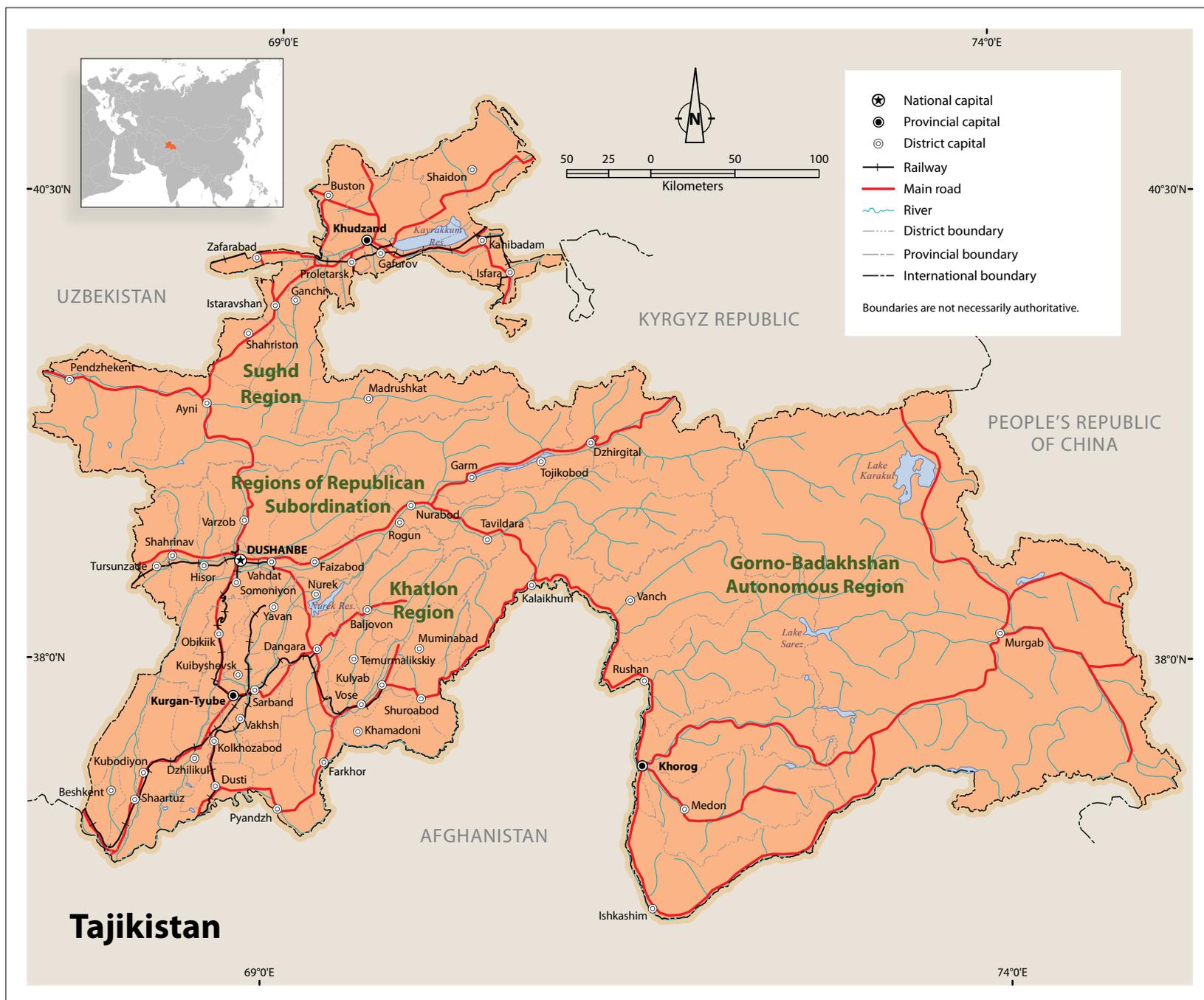
Tajikistan has an area of 142,557 square kilometers, and stretches roughly 700 kilometers east to west and 350 kilometers north to south. It is the region's smallest country, and shares borders with the Kyrgyz Republic to the north, Uzbekistan to the north and west, Afghanistan to the south, and the People's Republic of China to the east. Some 93% of land is mountainous, and approximately half lies 3,000 meters or more above sea level. Desert and semidesert zones are found in the south and southwest. To the southeast and east rise the Pamir Mountains, and to the north are the Alay and Kurama ranges. The vast mountains separate the country into various regions, and further separate these regions into a

patchwork of valleys, often making communication difficult. Tajikistan is endowed with numerous rivers, principal among them being the Amu Darya, Syr Darya, Pianj, Vakhsh, and Kofarnihon.

Ethnically, the country's estimated 7 million people are 80% Tajik, 15% Uzbek, and 1% Russian and Kyrgyz each. Other nationalities include Germans, Koreans, Turkmen, and Ukrainians, as well as small Iranian ethnic groups. Though Tajik is the official state language, Russian is widely used in business and Uzbek is spoken by roughly 25% of the population. Nearly three-quarters of the population live in rural areas.

From Growing Pains to Growing Economy

While each of its regional neighbors experienced economic disruption in the period following the 1991 breakup of the former Soviet Union, only Tajikistan suffered the turmoil of civil war (1992–1997). During this painful period, tens of thousands were killed or displaced, the economy weakened, and wildlife and protected areas deteriorated. In 1997, a brokered peace marked a new chapter



of stability. Reconstruction in the aftermath of the long civil conflict was slow. The country, however, has made substantial progress, with gross domestic product growth averaging roughly 8.6% over the last 5 years, incidence of poverty falling from 81.0% to 44.4% between 1999 and 2003, and people living with less than the revised standard of US\$2.15 per day, declining from 81% to less than 60% between 1999 and 2007.

Although poverty has shown significant declines, and progress has also been made in education, Tajikistan remains the poorest nation in Central Asia and one of the poorest in the world. Moreover, its growing economy is undergoing accelerating inflation, led by increases in food and energy prices in recent years.

Economics and the Environment

Aluminum and cotton have long been the mainstays of the Tajik economy. But cotton is now losing its priority in the economy and its place is being taken by fruits and other horticultural products. The area planted to cotton is decreasing

while that of orchards is increasing. Still, cotton contributes about 20% of exports, is farmed on 75% of irrigated land, supports 75% of farm households, and is the primary source of income for 75% of poor households. But as in other parts of the region, cotton has been planted extensively in semiarid tracts using irrigation networks that have not been well maintained, resulting in soil damage from salinity and chemical fertilizers and the spread of toxic elements to downstream fields, endangering populations. Since independence, Tajikistan has stopped using toxic chemicals in agriculture and greatly reduced the amounts of mineral fertilizers applied.

Tajikistan's aluminum industry, which provides almost 40% of exports, is a key performer but another cause of environmental concern. Aluminum is produced at the state-owned Tajik Aluminum smelter (TadAz) in Tursunzade. The smelter is the country's largest enterprise and among the world's largest smelters. However, it is extremely energy inefficient and, being of Soviet-era design, there are a number of legacies, which include contamination of the surrounding environment.



■ Young girls in colorful dresses for the national festival of Navrus, which takes place around the spring equinox (21 March) and is the biggest Central Asian holiday.



■ **Top:** Rolling hillsides of Sangtuda, southern Tajikistan. **Middle:** Fruits and vegetables, such as these onions, contribute to the economy's growth. **Bottom:** About a third of poor households in the country rely on cotton.

On an environmentally bright note, the robust economic growth in 2007 was driven by rapid expansion outside the aluminum and cotton sectors. In fact, industry almost doubled its rate of growth in almost all subsectors but aluminum, with expansion in construction materials, food processing, and textiles leading the way. Non-cotton agriculture also expanded, driven by higher production of livestock, fruits, and vegetables, as did the service sector, thanks to expansion in construction, finance, and trade—evidence of increasing consumer spending and demand. This multisector expansion suggests solid movement toward a more diversified economy. Remittances from Tajik workers employed in the construction and oil sectors in Kazakhstan and the Russian Federation also played a part in boosting the Tajik economy and bringing in much-needed foreign exchange capital.

Immense Water Resources

Tajikistan is rich in mineral resources, including gold, silver, and uranium. As with the Kyrgyz Republic, however, water may be its greatest resource asset. The country's hydro capacity places it among the top 10 nations in the world for hydropower potential. Hydropower provides virtually all of the country's electricity needs, yet only a tiny percentage of estimated capacity is used. Projects under way to exploit this vast unused potential include the Rogun station on the Vakhsh and Dashtijum station on the Pianj; others are being considered. Plans are also being made to build networks for electricity export outside the region.

Like the Kyrgyz Republic, Tajikistan lacks alternative energy resources and so meets its

energy demands through release of water in the winter, which affects downstream countries. Better intercountry water management and enforceable agreements are needed.

Rich Biota In Need of Protection

Tajikistan has diverse ecosystems and a wide array of flora and fauna. Plant species number in the thousands. They reflect altitude zonation, and range from arid to alpine, polar, and subtropical vegetation, with alpine meadows, and mountain and *tugai* forests comprising the most productive and diverse ecosystems. But these ecosystems are under threat. Unsustainable agricultural and industrial practices have resulted in land degradation, while natural disasters, such as earthquakes, droughts, and floods have, in some instances, combined to make things worse. Deforestation, land erosion, and salinization are common, and have degraded mountains, lowland plains, and valleys alike. Provision of safe drinking water in cities and towns has also become a major concern.

Reversing years of environmental abuse dating from the Soviet era will take time. And due to civil conflicts in the 1990s, Tajikistan had gotten off to a much slower start than its neighbors. There is hope, however. Regarding "water, the atmosphere, flora, fauna, and other natural resources," Article 13 of the Republic of Tajikistan Constitution has this to say: "the government guarantees their effective utilization in the interests of the people."

The Law on Nature Protection strengthens this mandate by establishing frameworks to prevent environmental degradation, and ensure environmental quality. With so many of Tajikistan's



people living in rural areas and depending on natural resources, protection of the environment is crucial. Recent economic expansion, reductions in poverty, and less reliance on cotton and aluminum

are encouraging. Economic growth will continue, however, only if environmental laws are supported and enforced.

■ **Left:** The remote Pamir Highway, also known as the Rooftop of the World. **Right:** A top employer and a major player in Tajikistan's economy, the Tursunzade aluminum plant; however, its environmental effects raise concern.

Dushanbe

Some have called it Central Asia's most beautiful capital. A planned city, Dushanbe is known for its spacious tree-lined streets, pastel public buildings, and numerous squares and parks. Its mostly one-story buildings, kept this height as a precaution against earthquakes, create a pleasant and relaxing atmosphere. Add in its breathtaking mountain backdrop and it's easy to see why the city is so eye-catching. Nonetheless, Dushanbe is a city on the move, with the town center boasting a host of earthquake-resistant, new high-rise buildings, and a population that has grown to more than 650,000 people.

Covering roughly 124 square kilometers in Gissar Valley at the confluence of the Varzob and Kafernihon rivers in southwest Tajikistan, Dushanbe is a relatively young city. Built by the Soviets in the 1920s on the site of three former settlements, the largest of which was called Dushanbe for its Monday bazaar (Tajik dushanbe, meaning Monday), it became the capital of the Tajik autonomous oblast in 1925. Dushanbe received a major boost in the 1950s when Soviet big-state planning turned it into a cotton- and silk-producing center, and tens of thousands of people were relocated there.

Dushanbe became the capital of independent Tajikistan in 1991, and though it suffered during the Tajik civil war, at war's end the Tajik economy revived and the city experienced a renaissance.

A beautification program began. Strong multi-story apartment and office buildings sprang up. New cafes, restaurants, hotels, and shopping centers as well as theaters and ethnic museums opened their doors. And Dushanbe transformed into a vibrant and growing cultural, commercial, and industrial center that is a leading source for cotton textiles, clothing, appliances, machinery, and foodstuffs, and a home to telecommunications and other service companies. A burgeoning ecotourism trade for visitors wanting to take in the surrounding natural beauty has also ignited.

But for Dushanbe to move forward, more needs to be done. One key to ensuring success is to provide greater access to regional markets. Several projects are under way to upgrade Tajikistan's road network. Of particular promise are plans for a tunnel through the Anzob and Shakhristan Pass that will connect the city with the country's northern region, and a highway linking Dushanbe with the People's Republic of China.



■ **Top:** Ayni Opera and Ballet Theater in Dushanbe. **Middle:** A holiday crowd by the statue of Lenin in Hissar, near Dushanbe, during the festival of Navruz. **Bottom:** A football game in front of the Medressa-i-Kuhna, a Muslim school that dates back to the 16th century, in Hissar.