Role of Turkmenistan on the New Silk Road in the 21st Century

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Content

1. Preface
2. Historical Approach on Turkmenistan in the Silk Road
   2.1 The ‘Silk Road’, the ancient trade route
   2.2 Historical development of trade route
   2.3 Turkmenistan on the way to Silk Road
   2.4 Important cities on the Silk Road
3. The New Silk Road and Energy Silk Road in Central Asia
   3.1 The New Silk Road
   3.2 Energy Silk Road in the Central Asia
   3.3 Transport Corridor: New Trade, Old Routes
4. Role of Turkmenistan in the New Silk Road
   4.1 The World's Fourth-Largest Reserves of Natural Gas
   4.2 New Pipelines: Turkmenistan-Iran-Turkey
   4.3 Turkmenistan’s Role of Transport and Trade
   4.4 Merv as a world heritage site
5. Concluding Remark

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1 This is the full text that I presented at the international scientific conference on "Origin of Turkmen People and Development of World Culture" was held at Ashgabat, Turkmenistan on February 23-24, 2011. See the Summery: http://hopia.net/ries/news/rnw23.htm, http://hopia.net/kime/news/knw24.htm

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2. Historical Approach on Turkmenistan in the Silk Road

2.1 The ‘Silk Road’, the ancient trade route

The Silk Road was one of the first trade routes to connect the East and the West. It was important paths for cultural, commercial and technological exchange between traders, merchants, pilgrims, missionaries, soldiers, nomads and urban dwellers from Ancient China, Ancient India, Ancient Tibet, Persian Empire and Mediterranean countries for almost 3,000 years. Extending 6,500 km, the routes enabled people to transport goods, slaves and luxuries such as silk, satin and other fine fabrics, musk, other perfumes, spices, medicines, jewels, glassware and even rhubarb, as well as serving as a conduit for the spread of knowledge, ideas, cultures, zoological specimens and some non indigenous disease conditions between Ancient China, Ancient India (Indus valley, now Pakistan), Asia Minor and the Mediterranean.

The most active periods of the Silk Road were 200 BC to AD 400, and then AD 600 to 1200. The Silk Road was not really one road, but an interlocking network of caravan trails linking scattered oases and trading posts that stretched for 6,500 km across Central Asia. The name of ‘Silk Road’ was first coined in 1877 by the German geographer Baron Ferdinand von Richthofen (1833–1905), who made seven expeditions to China from 1868 to 1872.

The unification of Central Asia and Northern India within Kushan Empire in the 1st to 3rd centuries reinforced the role of the powerful merchants from Bactria and Taxila. They fostered multi-cultural interaction as indicated by their 2nd century treasure hoards filled with products from the Greco-Roman world, China and India. The main traders during Antiquity were the Indian and Bactrian traders, then from the 5th to the 8th century CE the Sogdian traders, then afterward the Arab and Persian traders.

The Silk Road also led to the exchange of knowledge, culture, religion, and technology between the East and West. Buddhism, Islam, Christianity, Manichaeism, and Zoroastrianism were among the faiths that spread along the route. Algebra, astronomy, Arabic numerals, medical techniques, architectural styles, and a host of primarily Chinese techniques and inventions, e.g., printing and papermaking, spread from East to West, while various construction techniques, seafaring methods, medicinal plants and poisons, cotton cultivation, and horse-related items such as saddles and stirrups spread from West to East.

The Silk Road was not only the ancient world's most strategic trade route, but was also the information superhighway of its day, carrying knowledge and ideas between east and west that shaped entire civilizations. Perhaps the most important commodity to travel along its perilous pathways was not silk, but religions, from Zoroastrianism, Buddhism, Christianity and Islam. Trade on the Silk Road was a significant factor in the development of the great civilizations of China, India, Egypt, Persia (Ancient Iran), Arabia, and Rome, and in several respects helped lay the foundations for the modern world. For the most part, goods

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4 http://www.answers.com/topic/silk-road#ixzz1Bh5rCYws
were transported by a series of agents on varying routes and were traded in the bustling markets of the oasis towns\(^6\).

[Map 1] The Silk Road

Source: http://www.asian-studies.org/eaa/silkroad.htm

2.2 Historical development of trade route

The Silk Road from China to western world in ancient times used the overland. The intercontinental Silk Road divides into the northern and southern routes bypassing the Taklamakan Desert and Lop Nur.

The northern and southern Silk Roads followed the line of oasis settlements set near the encircling mountain ranges which supplied the oases with melt-water. Until the arrival of explorers in the late nineteenth century, few travelers ventured into the central area. Partly divided by the Tarim and Khotan Darya rivers, the area consisted of a series of deserts, with the Gobi desert to the east and the Taklamakan to the west. In the center was an ancient lake, Lop Nur\(^7\).

Both routes joined the main southern route before reaching Merv (Turkmenistan). A route for caravans, the northern Silk Road brought to China many goods such as "dates, saffron powder and pistachio nuts from Persia; frankincense, aloes and myrrh from Somalia; sandalwood from India; glass bottles from Egypt, and other expensive and desirable goods from other parts of the world."\(^8\)

A trade route is a logistical network identified as a series of pathways and stoppages used for the commercial transport of cargo. Allowing goods to reach distant markets, a single trade route contains long distance arteries which may further be connected to several smaller networks of commercial and non commercial transportation\(^9\).

Historically the Western Asian, Mediterranean, Chinese and Indian societies had developed major transportation networks for trade from 1250 BCE–153 CE. Europe's early trading routes included the Amber Road. During the Middle Ages Maritime trade along the Spice route became prominent.

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\(^7\) Ibid., pp. 14-16.


With the advent of modern times, commercial activity was sometimes carried out without traditional protection of trade and under international free trade agreements, which allowed commercial goods to cross borders with relaxed restrictions. **Innovative transportation of the modern times includes pipeline transport, and the relatively well known trade using rail routes, automobiles and cargo airlines**.¹⁰

### 2.3 Turkmenistan on the way to Silk Road

The civilizations of the Silk Road include long forgotten empires like those of Sogdians and the Tangut or Xixia (西夏), and their centers range from Nisa and Merv (Chorasmia) through Bukhata and Samarkand (once the capital of Sogdia) to the old oasis towns of Kashgar, Bezeklik, Dunhuang and Khotan surrounding the Taklamakan and Lop deserts of Central Asia (now the Chinese provinces of Gansu and Xinjiang). Southwards, there were extensions of Silk Road trade routes into Afghanistan and Tibet.¹¹

Today Turkmenistan’s Merv was one of the important cities of Parthian Empire along with Kuchan, Semnan, Gorgan, Zabol and Yazd. Parthia first appears as a political entity in Achaemenid lists of governorates under their dominion. Prior to this, the people of the region seem to have been subjects of the Medes (an ancient Iranian people), and 7th century BCE Assyrian texts mention a country named Partakka or Partukka (though this "need not have coincided topographically with the later Parthia".¹²

The ancient Turkmenistan city of Merv (Mary) used to be the so-called Gate to Central Asia. It was especially important in terms of trade and politics in the 9th – 10th centuries. From Merv the travelers proceeded to Amul (Chardzhou, Turkmenistan) and further to Bukhara and then to Samarkand. The territory of Turkmenistan is still rich in monuments which in antiquity were the most considerable stops on the Silk Road. They are the magnificent, sometimes unique architectural masterpieces of the past.¹³

### 2.4 Important cities on the Silk Road

Three centuries before Christ, the Parthian tribes of horsemen arrived to establish their capital in Turkmenistan at Nisa. When their empire eventually encompassed much of Central Asia, the Parthians were a power which rivaled Rome. From Nisa, the Parthians controlled the Silk Road and oasis settlements and trading centers like the harsh desert cities of Merv and Serakhs. Ruins of these ancient sites, evacuated and studied by international teams of archaeologists, can be visited and enjoyed today. Turkmenistan later gained fame throughout

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¹¹ Wood, Francis, op. cit., p.10.
Central Asia for producing the skilled and fierce nomadic tribesmen who rode out on raids to seize the riches of the passing caravans. There are many important cities in Turkmenistan on the Silk Road.\(^{14}\)

- **The Parthian Capital of Nisa:**
  It dates from the 3rd century BC and was inhabited up until the 19th century. Diggings have revealed a grandiose architectural complex consisting of an extensive palace with ceremonial hall, treasure house and residences. There are also ruins at nearby New Nisa.

- **The Ancient City of Merv:**
  It is one of the oldest inhabited cities in Central Asia. At one point in its history, Merv was called 'The Pearl of the East'. Razed by the Mongols, it was rebuilt over the centuries and today five distinct cities cover 130 square kilometres.

- **Serakhs:**
  It was a Silk Road oasis on the route from Nishapur in nearby Persia to Merv and was in its heyday from the 10th to 12th centuries. Once known for its architectural wonders, Serakhs now boasts the mausoleums of Abul-Fazy, Yarti-Gumbez and Sheikh Lokman.

- **Kunya-Urgench:**
  It was the capital of old Khorezm, which in the 8th century was the largest independent Muslim state in Central Asia. At one point in its history the city was called Gurgenj and flourished as a stopover on The Silk Road artery to Russia. Today, pre-Mongol monuments and ruins of mausoleums, minarets and fortresses attract visitors.

- **Mashad-Misrian:**
  It was an ancient trading oasis and trading centre on the Khorezm-Persia route, is now a jumble of ruins of fortress walls and towers, mosques, mausoleums and minarets. Recently discovered remains of three caravanserais from the 11th to 12th centuries attest to the city's mercantile past.

- **Annau Fortress:**
  It is near the capital and boasts 15th-century ruins.

- **The Medieval City of Abiverd:**
  It was an important trading post from the 5th to the 7th centuries.

- **Daja-Khatin Caravanserai:**
  It is a remarkable structure dating from the 13th century.

- **Amul Fortress:**
  It dates from the 15th century and is located near Chardjev.

- **The Ancient Settlement of Parau:**
  It is centred around Kizil-Arvat.

\(^{14}\) [http://www.advantour.com/turkmenistan.htm](http://www.advantour.com/turkmenistan.htm)
3. The New Silk Road and Energy Silk Road in Central Asia

3.1 The New Silk Road

For more than 1,000 years, the Silk Road that ran for 11,000km from the Mediterranean across Asia to China brought east and west together and helped lay the foundations of the modern world. The fabled network circled the planet, until, in the 16th century, it faded into history as ships were able to transport goods cheaper and faster to far-off Cathay than over the hazardous land route that crossed some of the world's most inhospitable terrain.

Now, more than five centuries later, the New Silk Road is emerging, a commercial corridor that runs from the Middle East, with Dubai as its unofficial commercial capital, to Beijing, Shanghai and Hong Kong, Mumbai, Chennai, Kuala Lumpur, Singapore and Tokyo.

Trade between the Gulf and Asia is mushrooming with oil, gas, petrochemicals, water technology and banking moving east, while consumer products, migrant labor, energy investment, and so on, is moving west. This is establishing a new strategic link that is reviving the historic commerce of the ancient caravan network across the mountains, deserts and steppes of Asia.

The New Silk Road is a group of countries that are bound together by history, geography, and culture. It is a region that stretches from North Asia to North Africa, includes 61% of the world’s population, and accounts for 33% of the world’s economy. It is a group of countries that have historically accounted for much of the world’s trade.

The New Silk Road’s share of the global economy is rising steadily. Its share rose from 15% to 33%, on a PPP-basis, between 1980 and 2009. The gains have come not only at the expense of the developing world, but also Eastern Europe and Latin America. The region’s rise will not be a straight-line trajectory, and there are road bumps that might yet cut potential GDP growth rates. For example, East Asia has yet to rebalance away from exports towards private consumption, while the Middle East is still overly reliant on oil. Nonetheless, based on our 10-year nominal GDP forecasts, the new Silk Road’s growth rates will be higher than those of the developed economies, and the region’s share of the global economy will rise from 33% to 46%, on a crude PPP basis, between 2009 and 2020.

The New Silk Road between Asia and the Middle East is an example of sustainable growth in emerging markets, validating the strategic economic partnerships with China and India. Trade in the China-Middle East region (CHIME) has been rising steadily, with the UAE as China's 5th largest trade partner, registering a surplus of US$ 7.6 billion in the first half of 2007. Oil and gas will remain key Gulf exports to Asia, primarily to meet the growing needs of China and India. Half of Saudi Arabia's oil production of some 8m barrels a day is now going to Asia. Industry forecasts indicate that by 2025, China will be importing three times as much Gulf oil as the United States. Aramco has signed a deal with the state-run China Petrochemical & Chemical Corporation (Sinopec) to boost Saudi oil imports to 1.5m barrels per day by 2015, almost double its 2008 level.

The New Silk Road will also boost trade between Beijing and Brussels, and create extraordinary economic opportunities for the Central Asian countries. The Arab world will find a reasonable way and it will remain a key element in the changing global trading patterns that will shape the economies of the 21st century.

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15 “Weaving a New Silk Road: Power is Moving from West to East,” http://www.thefreelibrary.com

In recent years the term of the New Silk Road (NSR) has been widely used since 2000s. To be exact the name of NSR was coined after the attack of 9/11 in 2001. The 9/11 event in the US caused the Arab world and its money to turn away from the US. The main actors on this new route are Arab investors looking for right places to invest their oil dollars, including Sovereign Wealth Fund (SWF) and Asians seeking to secure energy supplies and find markets for the goods produced by their factories. In this process pipelines as the pathway of energy resources and the railroads in the transportation through the Central Asia gave rise to the importance of the Old Silk Road. Accordingly the Central Asia is spotlighting as the center of the eastern and western trade route.

As good luck would have it this new trade route nearly coincides with the Old Silk Road which had stopped since the 17th century. Basing on this reason, many of us widely call the new route by the name of the New Silk Road on the one hand and by the name of Energy Silk Road, emphasizing the energy resources on the other. Most of the roads in the Central Asia were ruled by Russia before 1990s. Now Russia and China are still competing for the hegemony of oil and gas development in this area and the struggle between US, participating EU and Japan, and China with Russia and Iran is upholding after the Afghanistan War.

However the New Silk Road does not simply imply only energy resources but carry many cultures along this route. NSR also interchanges as source for ideas, culture, and religion flowing the east and the west. It carries the knowledge and wisdom of the east to the advanced technology and the wealth of the west. The New Silk Road is important in every aspect of the modern civilization. Today the word of “The Silk Road” has used the extended meaning, expressing the trade route between the east and the west beyond the meaning of the route for silk. So to speak, the term of “The Silk Road”, a proper noun has changed into a common noun, symbolizing the modern trade route as "The New Silk
Road”. It is necessary that the term of the "The Silk Road" has to define a modern meaning with the current of the times. In this sense I define the New Silk Road is “The Civilization Road” in the 21\textsuperscript{st} century.

3.2 Energy Silk Road in the Central Asia

Ancient Silk Road has connected China and Central Asia for a long period of time. However, this route of trade and culture lost its previous influence with the change in patterns of trade, the initiation of other routes and attitudes of people towards each other and destructive effects of wars throughout this geography. Currently, ancient Silk Road gas revived with the energy trade between China and Central Asian states. Revival of the Silk Road has constructed a kind of a two way road between China and Central Asian states. Both sides have different gains, interests, aspirations and calculations in the formation of energy trade which has already transcend to other issue of areas.

Energy trade between China and Central Asia that is regarded to be the revival of the Silk Road in terms of energy trade has constructed a state of interdependence among the parties. Energy trade among Central Asian republics and China, which can be regarded as the revival of the Silk Road in terms of energy trade\textsuperscript{17}, acquires not only an economic significance but owns a great amount of strategic importance at the same time.

Quite naturally then, energy trade and investment between Asia and the Gulf have boomed since the mid-1990s. This is one important manifestation of a rapidly shifting architecture of global oil and gas markets away from a system dominated by flows of oil and LNG from the key producing regions to the rich, industrialized world of the United States, Europe, and Japan and toward fast-growing markets in developing Asia. New capital flows, energy partnerships, and strategic relationships are rapidly being built based on this historic shift in energy demand\textsuperscript{18}.

[Map 3] Central Asia’s Oil & Gas Map: Fields and Pipelines

\textsuperscript{17} The National Bureau of Asian Research (NBR), in coordination with the Global Energy and Environment Initiative at the School of Advanced International Studies of the Johns Hopkins University, organized a major conference entitled “The New Energy Silk Road: The Growing Asia–Middle East Energy Nexus,” in May 2009 in Washington, D.C.

This "Silk Road of the 21st century" features three components: a Eurasian Continental railroad bridge, a major highway, and a pipeline network, to be complemented eventually by a fiber optic highway. The 2004 Asian Highway Agreement, backed by 32 countries, features routes from Tokyo to Bulgaria through a unified highway system. Since December 2004, Transport Corridor Europe-Caucasus-Asia (TRACECA) has linked China's east coast to Rotterdam by rail through Mongolia, Kazakhstan, Russia, and Western Europe. These projects enjoy the financial backing of major international banks and institutions. In September 2008, the New Eurasian Land Transport Initiative (NELTI) conducted the first road transport of industrial and consumer goods along the Silk Road from the Asia-Pacific regions to Europe19.

Korea and Japan have long been major buyers of both crude oil and LNG from the Gulf. Both countries are virtually 100% dependent on imports for their oil and natural gas supplies and the Gulf provides between 80%–90% of their crude imports and a significant share of their LNG needs. Korea and Japan have become major investors in upstream LNG projects in the Gulf and have also sought to invest in upstream oil development, although with much less success. Both have been active in forging stronger diplomatic ties with the Gulf producers. With the emergence of China and India as booming new markets for crude and LNG, these two countries have now also become prominent buyers, investors, and diplomatic players in the Gulf alongside Japan and Korea. All four of the major Asian powers are intently focused on broadening their access to energy supplies in all the main exporting regions of the world and each is raising its future targets for so-called equity oil to be

controlled by their own national oil companies (NOC) and boosting their financial and diplomatic support for their NOCs or quasi-NOCs. In particular, they all are intensifying supply efforts among the key Gulf oil and LNG exporters20.

3.3 Transport Corridor: New Trade, Old Routes

The Eurasian Land Bridge, sometimes called the New Silk Road, is a term used to describe the rail transport route for moving freight and/or passengers overland from Pacific seaports in Siberia and China to seaports in Europe. The route, a transcontinental railroad and rail land bridge, currently comprises the Trans-Siberian Railway (TSR), which runs through Russia and is sometimes called the Northern East-West Corridor and the New Eurasian Land Bridge or Second Eurasian Continental Bridge, running through China and Kazakhstan21.

China's rail system had long linked to the TSR via northeastern China and Mongolia. In 1990 China added a link between its rail system and the Trans-Siberian Railway via Kazakhstan. China calls its uninterrupted rail link between the Chinese port city of Lianyungang and Kazakhstan the New Eurasian Land Bridge or Second Eurasian Continental Bridge. In addition to Kazakhstan, the railways connect with other countries in Central Asia, including Iran, but do not connect all the way to Europe through south Asia.

Proposed expansion of the Eurasian Land Bridge includes construction of a railway across Kazakhstan that is the same gauge as Chinese railways, rail links to India, Burma, Thailand and Malaysia, construction of a rail tunnel and highway bridge across the Bering Strait to connect the Trans-Siberian to the North American rail system, and construction of a rail tunnel between Korea and Japan. The United Nations has proposed further expansion of the Eurasian Land Bridge, including the Trans-Asian Railway (TAR) project22.

The Trans-Asian Railway is a project, sometimes called “Iron Silk Road” to link Singapore to Istanbul and is to a large degree complete with missing pieces primarily between Iran and Pakistan (under construction in 2005), and in Myanmar, aside from political issues. The project has also linking corridors to China, the central Asian states, and Russia. TAR was signed on 10 November 2006, by seventeen Asian nations as part of UNESCAP effort to build a ‘transcontinental railway network’23, between Europe and Pacific ports in China. The agreement formally came into force on 11 June 2009. Transportation and railway ministers from forty one nations participated in the week-long conference held in Busan, South Korea, where the agreement was formulated. The proposed 80,900-km railway network will originate from the Pacific seaboard of Asia and end on the doorsteps of Europe24.

21 As of November 2007, about 1% of the $600 billion in goods shipped from Asia to Europe each year were delivered by inland transport routes.
22 More details, see UN, Development of the Trans-Asian Railway, ST/ESCAP/2182.
23 The first Eurasian transcontinental railroad was the Trans-Siberian railway (with connecting lines in Europe), completed in 1905 which connects Moscow with Vladivostok on the Pacific coast. There are two connections from this line to China. It is the world's longest rail line at 9,289km long. This line connects the European Railroad System with China, Mongolia and Korea. Since the former Soviet Countries and Mongolia use a broader gauge, a break of gauge is necessary either at the Eastern frontiers of Poland, Slovakia, Hungary and Romania or the Chinese border. In spite of this there are through services of passenger trains between Moscow and Beijing or through coaches from Berlin to Novosibirsk.
The Asian Highway (AH) project, also known as the Great Asian Highway, is a cooperative project among countries in Asia and Europe and the UN ESCAP, to improve the highway systems in Asia. It is one of the three pillars of Asian Land Transport Infrastructure Development (ALTID) project, endorsed by the ESCAP commission at its forty-eighth session in 1992, comprising Asian Highway, Trans-Asian Railway (TAR) and facilitation of land transport projects.\(^{25}\)

The first car crossing of the full extent (East to West) of the new Asian Highway was achieved by Britons Richard Meredith and Phil Cotley in 2007 driving an Aston Martin. Including ferry trips and customs clearance delays, the journey took 49 days and crossed 18 countries.

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4. Role of Turkmenistan in the New Silk Road

4.1 The World's Fourth-Largest Reserves of Natural Gas

Today Turkmenistan is one of the Turkic states in Central Asia. Until 1991, it was a constituent republic of the Soviet Union, the Turkmen Soviet Socialist Republic (Turkmen SSR). Turkmenistan is one of the six independent Turkic states. It is bordered by Afghanistan to the southeast, Iran to the south and southwest, Uzbekistan to the east and northeast, Kazakhstan to the north and northwest and the Caspian Sea to the west.

Turkmenistan for centuries formed part of the Persian province of Khurasan; in medieval times Merv (today known as Mary) was one of the great cities of the Islamic world and an important stop on the Silk Road. Annexed by Russia between 1865 and 1885, Turkmenistan became a Soviet republic in 1924. It achieved independence upon the dissolution of the USSR in 1991.

<Table 1> General Turkmenistan

<table>
<thead>
<tr>
<th>Country name</th>
<th>Turkmenistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government type</td>
<td>Secular democracy and a presidential republic</td>
</tr>
<tr>
<td>Administrative divisions</td>
<td>5 provinces and 1 independent city (Ashgabat)</td>
</tr>
</tbody>
</table>

Sources: http://upload.wikimedia.org/wikipedia/commons/2/21/Asian_Highways.png
Independence: 27 October 1991 (from the Soviet Union)
Capital: Ashgabat
Area: 488,100 sq km
Population: 4,940,916 (July 2010 est.)
Population growth rate: 1.14% (2010 est.)
Age structure:
- 0-14 years: 28.9%
- 15-64 years: 66.9%
- 65 years and over: 4.3%
Life expectancy at birth: 68.2 years
Urbanization: Urban population: 49% of total population (2008)
Ethnic group: Turkmen 85%, Uzbek 5%, Russian 4%, other 6% (2003)
Religion: Muslim 89%, Eastern Orthodox 9%, unknown 2%
Language: Turkmen (official) 72%, Russian 12%, Uzbek 9%, other 7%
Literacy: 98.8%


Extensive hydrocarbon/natural gas reserves could prove a boon to this underdeveloped country once extraction and delivery projects are expanded. The Turkmen Government is actively working to diversify its gas export routes beyond the still dominant Russian pipeline network. In 2010, new gas export pipelines that carry Turkmen gas to China and to northern Iran began operating, effectively ending the Russian monopoly on Turkmen gas exports. President for Life Saparmurat Nyyazow died in December 2006, and Turkmenistan held its first multi-candidate presidential election in February 2007. Gurbanguly Berdymuhamedow, a deputy cabinet chairman under Nyyazow, emerged as the country's new president.

Turkmenistan possesses the world's fourth-largest reserves of natural gas and substantial oil resources. Turkmenistan is largely a desert country with intensive agriculture in irrigated oases and sizeable gas and oil resources. The two largest crops are cotton, most of which is produced for export, and wheat, which is domestically consumed. Although agriculture accounts for roughly 10% of GDP, it continues to employ nearly half of the country's workforce. With an authoritarian ex-Communist regime in power and a tribally based social structure, Turkmenistan has taken a cautious approach to economic reform, hoping to use gas and cotton export revenues to sustain its inefficient economy. Privatization goals remain limited.

### Turkmenistan's Economic Index

| GDP | $36.64 billion (2010 est.) - purchasing power parity |
| GDP-real growth rate | 11% (2010 est.) |
| GDP-per capita (PPP) | $7,400 (2010 est.) |
| Labor force | 2.3 million (2008 est.) |
| Labor force by occupation | Agriculture: 48.2%, Industry: 14%, Services: 37.8% (2004 est.) |
| Age Structure | 0-14 years: 28.9%, 15-64 years: 66.9%, 65 years and over: 4.3% |
| Unemployment rate | 60% (2004 est.) |
| Budget | Revenues: $1.97 billion, Expenditures: $1.878 billion (2009 est.) |
| Debt - external | $5 billion (2009 est.) |
| Inflation rate | 12% (2010 est.) - consumer prices |

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<table>
<thead>
<tr>
<th>Agriculture - products</th>
<th>cotton, grain; livestock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industries</td>
<td>natural gas, oil, petroleum products, textiles, food processing</td>
</tr>
</tbody>
</table>

### Export

<table>
<thead>
<tr>
<th>Total amount</th>
<th>$9.672 billion (2010 est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodities</td>
<td>gas, crude oil, petrochemicals, textiles, cotton fiber</td>
</tr>
<tr>
<td>Partners</td>
<td>China 18.03%, Turkey 16.49%, Russia 16.45%, Germany 5.91%, UAE 5.81%, Ukraine 5.67%, US 5.41%, France 4.32% (2009)</td>
</tr>
</tbody>
</table>

### Import

<table>
<thead>
<tr>
<th>Total amount</th>
<th>$4.888 billion (2010 est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodities</td>
<td>machinery and equipment, chemicals, foodstuffs</td>
</tr>
<tr>
<td>Partners</td>
<td>China 18.03%, Turkey 16.49%, Russia 16.45%, Germany 5.91%, UAE 5.81%, Ukraine 5.67%, US 5.41%, France 4.32% (2009)</td>
</tr>
</tbody>
</table>

Note: In the past, Turkmenistan’s economic statistics were state secrets. The new government has established a State Agency for Statistics, but GDP numbers and other figures are subject to wide margins of error. In particular, the rate of GDP growth is uncertain.


In 2010 Ashgabat started a policy of diversifying export routes for its raw materials. China is set to become the largest buyer of gas from Turkmenistan over the coming years as a pipeline linking the two countries, through Uzbekistan and Kazakhstan, reaches full capacity. In addition to supplying Russia, China and Iran, Ashgabat took concrete measures to accelerate progress in the construction of the Turkmenistan-Afghanistan-Pakistan and India pipeline (TAPI)\(^\text{27}\).

Turkmenistan has previously estimated the cost of the project at $3.3 billion. On May 21, President Gurbanguly Berdymukhammedov unexpectedly signed a decree stating that companies from Turkmenistan will build an internal East-West gas pipeline allowing the transfer of gas from the biggest deposits in Turkmenistan (Dowlatabad and Yolotan) to the Caspian coast. The East-West pipeline is planned to be around 1000 km long and have a carrying capacity of 30 bn m\(^3\) annually, at a cost of between one and one and a half billion US dollars\(^\text{28}\). According to the decree of the Peoples' Council of 14 August 2003, electricity, natural gas, water and salt will be subsidized for citizens up to 2030.

[Map 5] Map of Potential Pipeline Routes

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New pipelines to China and Iran, that began operation in late 2009 and early 2010, have given Turkmenistan additional export routes for its gas, although these new routes have not offset the sharp drop in export revenue since early 2009 from decreased gas exports to Russia. Overall prospects in the near future are discouraging because of widespread internal poverty, endemic corruption, a poor educational system, government misuse of oil and gas revenues, and Ashgabat's reluctance to adopt market-oriented reforms.

4.2 NEW PIPELINES: Turkmenistan-Iran-Turkey

The first formal Iranian proposal for a pipeline came in August 1994, was finalized in January 1995, and was initially conceived in the context of discussions on building a gas pipeline to link Turkmenistan to Turkey and also to European gas markets via Iran. The broader project was one that had strong support in both Iran and Turkey.

Turkey was the major intended off-taker, as in the mid-1990s the Petroleum Finance Company estimated that Turkey's demand for gas would rise rapidly, from 9 bcm in 1997 to 52 bcm in 2010. After the Turkish economic crisis of the late 1990s these estimates were scaled downward. In October 1995, certain that the larger pipeline project would be slow to develop, the National Iranian Oil Company of Iran (NIOC) decided to begin construction of

31 Firat Yildiz, Turkmenistan, pp. 11-12.
the Korpedzhe to Kurt-Kui pipeline. It signed a 25-year contract with the Turkmen government to assure its supply. Iran agreed to finance 90 percent of the cost of the pipeline, to be paid back through gas deliveries over a three-year period.

The pipeline was opened in December 1997. But the amount of gas transported through the pipeline has fallen short of the Turkmen government’s planned goals. In 2000, Iran imported 3 bcm, and in 2001, 4.4 bcm, but exports to Iran rose sharply in early 2003, and Turkmenistan exported 6.5 bcm to Iran in 2003 and 2 bcm in the first two months of 2004.

Iran had hoped that the revitalization of the Economic Cooperation Organization (ECO) would help facilitate Teheran's plans for dominance in the region in general and for marketing Turkmenistan’s gas supply in particular. The May 1997 ECO summit in Ashgabat was used as an occasion for the Presidents of Turkmenistan, Turkey and Iran to sign a memorandum of understanding which provided for the eventual export of up to 30 bcm per year of Turkmen gas to be transited across Iran to Turkey. Turkmenistan's gas was to come from the large Dauletabad gas field, the resource for any major new pipeline from Turkmenistan (this field also figured in the Unocal pipeline proposal that was being developed at the same time).

From the Iranian point of view, the planned pipeline was particularly attractive as it would have maximized the profitability of Iranian gas, which would be swapped for Turkmen gas sent west through the Turkish pipeline system. The Turkmen gas would move into Iran's northern gas pipeline network to supply Iran and its other prospective customers. The plan for the larger Turkmen-Iranian Pipeline had floundered in large part because of the U.S.-Iranian policy, which has also hampered the development of Iran's own vast gas potential. At the same time, by 2001, and certainly by late 2002, it was clear that the U.S. supported oil and gas pipelines linking Baku, Azerbaijan, to the Turkish port of Erzurum and that the Iranian-Turkish pipeline was going to be built, creating yet another source of gas entering Turkey. Like Iran, Russia hoped to dominate the Turkish market, and Gazprom had linked up with Turkish economic interests that hoped to supply between 30 bcm and 50 bcm per year to the Turkish market by 2010.

4.3 Turkmenistan’s Role of Transport and Trade

The new century witnessed important changes both within Turkmenistan and in Turkmenistan’s relationship to issues of transport and trade. By September, 2006, the European Parliament’s Committee for International Trade put on hold its ratification of a provisional trade accord between the EU and Turkmenistan. In announcing its decision, the Parliament declared it would approve the treaty "only when Ashgabat has made "apparent, discernible, and consistent progress in the sphere of human rights." As this climate coalesced in the years before 2006 it adversely affected investment in Turkmenistan. True, the Turkmen government had decided to allow foreign investment only in off-shore energy initiatives, on the unstated grounds that the presence of international investors might discourage other states (ex. Russia) from taking action against such projects. The yields on gas sales assured steady economic growth, although the rate of expansion in the period 2001-2006 was surely much lower than the 17% claimed by the government. This in turn provided a kind of insurance

32 Ibid., pp. 13-14.
33 Ibid., p. 16.
policy for the government, protecting it from the worst affects of some of its more questionable policies.

It is tempting to suggest that Turkmenistan's actions were leading to the country's steadily deepening isolation. Yet as we will see, this is actually a period of realignment, in which at first Turkmenistan adopted a more "Asian approach" to trade and transport, as exemplified by its various openings to China and the renewal of its trans-Afghan pipeline project (Turkmenistan-Afghanistan-Pakistan-India, or TAPI), and then, during 2006, began to revive its flagging transport relations with the West. Amidst this shifting picture, the three points of absolute consistency have been the country's steady engagement with ECO transport schemes, its consistent efforts to improve transportation across the border with Iran, and its critically important relations with Russia's Gazprom\(^{34}\).

### 4.4 Merv as a world heritage site

Turkmenistan established an archaeological park to protect the walled cities of Merv in 1987 and declared a World Heritage Site in 1999. Merv is currently the focus of the Ancient Merv Project (initially as the International Merv Project). From 1992 to 2000, a joint team of archaeologists from Turkmenistan and the UK have made remarkable discoveries. In 2001, a new collaboration was started between the Institute of Archaeology, University College London and the Turkmen authorities. This Ancient Merv Project is concerned with the complex conservation and management issues posed by this remarkable site, furthering our understanding of the site through archaeological research, and disseminating the results of the work to the widest possible audience\(^{35}\).

The cities that developed at Merv span the last 2,500 years, and together they form one of the most complex and well-preserved urban centers on the Silk Roads of Central Asia. The series of major cities were home over 2,000 years to hundreds of thousands of administrators, politicians, soldiers, scholars, trades people, mothers, fathers and children. At times Merv has been capital of vast empires, at times a trading, military and administrative base. Eventually its importance declined, by-passed on the east-west trade routes by the growing importance of sea trade, and then sacked by the armies of Genghis Khan.

In 1987 Turkmenistan established an archaeological park to protect the walled cities, some of the immediate extra-mural areas, and selected outlying buildings. This has already done much to improve the basic condition of the site, removing modern agriculture from within the walled areas and generally improving access to the monuments. In 1999 the site was declared a World Heritage Site. However, there are daunting conservation issues and in 2000 Merv was placed on the World Monuments Watch's list of the world's 100 most endangered sites\(^{36}\).

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* References

Board of Trustees of the University of Illinois, 2009, "Central Asia: The New Silk Road's Gordian Knot?" http://www.historycooperative.org/journals/whc/6.1/carls.html
http://upload.wikimedia.org/wikipedia/commons/2/21/Asian_Highways.png
http://www.answers.com/topic/silk-road#ixzz1Bh5rCYws
http://www.asian-studies.org/eaa/silkroad.htm
http://www.businessweek.com/magazine/content/08_46/b4108046862940.htm
http://www.orexca.com/world_heritage.php and http://www.ucl.ac.uk/merv/
http://www.thefreelibrary.com, “Weaving a New Silk Road: Power is Moving from West to East"
http://www.unescap.org/tdw/common/TIS/TAR/images/tarmap_latest.jpg
http://www.worldpress.org/images/maps/central_asia1.gif


The Telegraph. “Arabia takes the New Silk Road to China, spurning the West.” Friday 21 January 2011.


UN. Development of the Trans-Asian Railway. ST/ESCAP/2182


Whitefield, Susan. 1999. Life along the Silk Road. (Berkely: University of California).