Chapter-I

INTRODUCTION
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RATIONALE OF STUDY

The Republic of Kazakhstan lies at the centre of the Eurasian continent. With an area of 2.7 million sq. km., Kazakhstan is the largest country among the five Central Asian Republics (CARs) and ninth largest in the world (Embassy of the Republic of Kazakhstan in India, 2005: 5). In terms of area, it comes after Russia, Canada, China, USA, Brazil, Australia, India and Argentina. It is the second largest country in the Commonwealth of Independent States (CIS), the first being Russia. In size, it is equal to Western Europe or 86 percent of India’s territory (ibid). Kazakhstan has a population of only 15.8 million, which is low compared to its size (Embassy of the Republic of Kazakhstan in India, 2008a: 2). In terms of population, Kazakhstan stands 62nd in the world and population density is about 5.5 people per square kilometre (UNDP/UNFPA Report 2008: 2).

Kazakh economy is mainly dependent on its natural resources. Petroleum is the main product followed by mining. Kazakhstan consists of 1.5 percent of the world’s hydrocarbon reserves, which is next to Russia among the CIS countries (Umarov 2006: 4). According to Kazakhstan government sources, the recoverable hydrocarbon reserves consist of 30 billion barrels of oil and 3.0 trillion cubic meters of gas (Embassy of the Republic of Kazakhstan in India, 2005: 7). By 2015, its offshore oil exploration might reach 3.0 million barrels a day (i.e. 150 million tonnes per year) (ibid: 8). Kazakhstan is also rich in hard-rock minerals like coal, iron ore, copper, lead, zinc, tungsten, nickel, chromium, molybdenum, manganese, phosphates, titanium, aluminium, gold, silver, etc. Kazakhstan’s industry is mainly agro-based. Other industries include machine building consisting of construction equipment, tractors, agricultural machinery and some military items. Besides, there are other industries of iron ore, sulphuric acid, ferro-concrete, knitwear, footwear, hosiery, etc. The country has immense agricultural potential. The vast steppe lands are conducive for livestock and grain production. Wheat is the main crop and a major agricultural export to the other countries in the region. Livestock like sheep
and cattle are reared for their high quality wool and meat respectively. Other agricultural products are sugar beet, potatoes, vegetables, cotton, etc.

Kazakhstan has been experiencing impressive economic growth of over 9 percent since 2000. The GDP growth in 2005 was 9.7 percent, 10.7 percent in 2006 and 8.5 percent in 2007 (Ministry of Economy and Budget Planning 2009: 10). In 2002, Kazakhstan’s monetary policy carefully managed strong foreign currency inflows without increasing inflation. Kazakhstan is the first country in the former Soviet Union to receive an investment-grade credit rating from a major international credit rating agency in 2002. Foreign Direct Investment reached $70 billion since 1991 due to favourable investment climate (Umarov 2008: 15). The country is included into the World Bank list of 20 countries with the most investment friendly environment. According to World Economic Forum, Kazakhstan is 56th in the world’s competitiveness ranking, which overtakes all CIS countries (Office of the United Nations in Kazakhstan 2007: 87). There is free flow of capital and 100 percent currency convertibility in Kazakhstan. Inflation is as low as 5-7 percent. Literacy rate is 98 percent in the country. Hence, Kazakhstan as compared to other Central Asian Republics provides a unique case study especially in the economic sector.

Kazakhstan’s impressive economic performance is primarily because of various reforms introduced by the government. The present study deals with the various reform measures in Kazakhstan to analyse the economic development in Kazakhstan since independence. The study also examines sector-wise development of the Kazakh economy.
Map- 1.1

Central Asia and Its Neighbours

Source: Adapted from www.reliefweb.int/map/cis/reg/cau/caucia.html
Boundary representation not necessarily authoritative.
The section below gives an overview of the Republic of Kazakhstan including its history, economy, geography, people, government, etc. A brief description of the Soviet economic policies in Central Asia is given to have a better understanding of the Kazakh economic policies after independence. The discussion on geography, natural resources, people, transportation and communication, government and international relations also gives a broader picture of the Republic, essential to understand the economic base and policies of the Republic.

HISTORICAL PERSPECTIVE

Historically, Kazakhstan has been a bridge between West and East and between South and North. Kazakhstan has civilisation of thousand years since the Iron Age (8000-2000 BC). Archaeological excavations highlight Kazakhstan’s connections with the outside world in the ancient time. Kazakhstan also played a major role in the Great Silk Route. The silk route served as the bridge between East and West, connecting countries through trade and cultural exchanges (Embassy of the Republic of Kazakhstan in India, 2008b: 4). Kazakhstan in ancient days had contacts with India, Byzantium, Persia and China as
revealed from artefacts excavated along the Silk Route cities of Kazakhstan. Most of the world religions like Islam, Christianity, Buddhism and Zoroastrianism had profound influence in the region (Umarov 2008: 14).

The nineteenth century Central Asia consisted of three Khanates- Kokand, Bukhara & Khiva. They were economically backward feudal states with strong remnants of the ‘much older slave-owning society’ (Kaushik 1976: 53). Among the Turkmen, Kazakh and Kirgiz nomads, the tribal system was prevalent. The main occupations of the people were cattle breeding and horticulture. Small quantity of inferior quality cotton was also produced in the Central Asian Khanates. Towns were centres of handicraft production and trade. Cotton and silk cloth produced by craftsmen in Bukhara, Kokand, Tashkent and Samarkand were sold in the neighbouring areas and in the Russian Empire (ibid). Taxation was heavy and mostly realised in kind, which had an adverse effect on the development of capitalist relations (ibid). Feudal oppression and extractions by money-lenders hampered the growth of the handicrafts and agriculture (ibid: 53-54).

After the Russian conquest, Central Asia was converted into a raw material supplying base for the mainland Russian industries. To meet the needs of cheap domestic cotton of the Russian textile industry, the Tsarist administration paid great attention to cotton cultivation and encouraged it at the expense of wheat and other cereals. The fertility of the Fergana valley and the successful introduction of American cotton in 1894 made cotton a key product in Central Asia. The area under cotton cultivation grew from 13,200 hectares in 1886 to 597,200 hectares in 1914 (Kaushik 1976: 55). The Director of Land Administration in Turkistan wrote in 1913: “Every pood of Turkestan wheat means competition with Russian and Siberian wheat, every pood of cotton means competition with American cotton. Hence it is better to import food grains into the territory and free the irrigated land there for cotton cultivation” (ibid: 55-56). The high tariff on cotton imported from abroad, the policy of levying equal taxes on land used for cotton cultivation and for other and less remunerative food-grains, made cotton the main cash crop of the region. But it did not change the feudal character of the Central Asian economy. The peasantry lost most of their land under the usurious terms of credit and
became the share-croppers. The crop-sharing system continued to be the dominant agricultural system in Central Asia.

The introduction of railways in the last decade of nineteenth century broke Central Asian economic isolation from the rest of the world. However railways did not much contribute to the internal consolidation of different regions. At that time, raw material processing industry, cotton ginning and cotton oil, soap, seer, brick manufacturing and wool cleaning industries were established in Central Asia. Industrial development of Central Asia was low; cotton ginning comprised 81.2 percent of the total industrial output (Kaushik 1976: 59). Workshops and factories engaged in the processing of agricultural raw materials accounted for approximately 90 percent of all industrial production (ibid). There was not a single textile mill in Central Asia, although the main crop was cotton. The entire textile industry was located in the central regions of Russia. The process of capitalist development could not gain ground in the region because of Tsarist rule and the feudal regimes of Bukhara and Khiva. On the eve of the October Revolution, Central Asia was an extremely backward agrarian colony of Tsarist Russia. With the Soviet rule several measures were taken to improve the economy of the region.

**SOVIET ECONOMIC POLICIES IN CENTRAL ASIA**

The former colonies of Russia had started falling apart soon after the October Revolution. The new Soviet government had to take measures to stop the disintegration process. Lenin realized that unless the Central Asian region was saved from the economic and social backwardness and brought to a stage of development at par with the developed areas, the Soviet government could not hope to achieve its aim of consolidating the territories. Rapid economic development of the country and balanced regional development were the twin objectives of the Soviet state. Lenin’s strategy in this regard was two-fold; an initial help from the developed regions and a simultaneous effort at tapping the resources of Central Asia to make it a flourishing segment of the Union. Thus, in 1918, “When soviet Russia was herself starving and in ruins”, Lenin assigned 50 million rubbles for the development of the irrigation works in Turkestan (Sharma 1979: 62).
The most important feature of socialist planning was ascertaining the volume and structure of social requirements and determining the extent of material resources and man-power needed to satisfy these requirements, i.e. attaining conformity between production and consumption. Ascertaining the requirements of society as a single organism is a special function of socialist planning. Social requirements constituted the needs of production, people's consumption and national defence, as well as public education, health protection, science and other spheres of non-productive activity. Social utility of products turned out to be the main demand made on all the economic sectors. The main idea in planning was to organise social production more efficiently so as to attain the objective of socialist production within the shortest possible period of time and with minimum expenditure of labour and material resources. One of the first aims of such economic planning was to raise the efficiency of social production in order to accelerate development of the country's productive forces and thereby raise the living standard.

**New Economic Policy (NEP):** In order to move towards socialist planning, the Soviet government introduced the New Economic Policy in 1921. It emerged as an alternative to the policies of war communism. It included the functional ethos of the transitional period, negating the policies of the earlier period, which soon developed into a well-calculated economic and social policy, designed to bring about growth in industrial productivity (Sharma 1979: 71). It resulted in a socialist re-organization of agricultural relations and promotion of trade and exchange. The *prodrazverstka* (surplus-appropriation system) was replaced by the *prodnalog*, i.e. selling to the state of a certain amount of products at fixed prices (tax in kind), with free use of the remaining products. To develop agriculture, raise agricultural productivity and marketable produce, it was necessary to supply the market with farm implements and the consumer goods the peasants needed. This required restoration of the respective agro-industries, transport and trading facilities, so that the needs of agriculture could be met. Gradually the NEP covered the whole web of socio-economic life of the Soviet society.

The single state economic plan was drawn up at the very beginning of NEP. Along with restoring the economic level of pre-revolutionary Tsarist Russia, this plan envisaged building a socialist economic foundation. The GOELRO plan was introduced
by the State Electrification Commission of the Soviet government, on Lenin’s insistence at the end of 1920. The State Planning Commission (GOSPLAN) and the Planning Commission of Turkistan, a part of Economic Council of Turkistan, were set up in 1921. The main idea of GOELRO was priority development of heavy industries, above all of the iron and steel industry, non-ferrous metallurgy and associated fuel industry, on the basis of electrification. By developing the leading sector of the economy it would become possible to transform other industries and agriculture. The main point in the GOELRO plan was the construction of the thirty regional power stations. The idea was to institutionalise the structural framework of a speedy transition to socialist economy. Krzhizhanovski, the Chairman of the GOELRO was of the opinion that it could be accomplished in about ten years time (Sharma 1979: 58). Lenin, however, was more cautious and said that transition to socialist economy would be possible in ten to fifteen year period (ibid).

Agriculture: The history of Non-Capitalist Path of Economic Development or Socialist Transformation of Agriculture in Central Asia may be divided into three basic stages: Preparation for transformation to socialist path (1920-29), Mass collectivization of agriculture (1929 - mid 1930s) and Consolidation and development of the collective farm system (from mid 1930s onwards) (Kaushik 1970: 233). In the first stage, the Communist Party and Soviet organization in Central Asia directed their efforts to improve the economic position of the peasants. So it was necessary, firstly, to carry out land and water reforms; secondly, to provide irrigation facilities; thirdly, to supply peasants with modern implements, introduce new agricultural methods and advance credits to make these improvements possible.

Soviet policy aimed at re-organisation of agriculture and its industrial bases. It abolished landowner’s right to own land, equipment and live-stock. The Central Committee of Communist Party of the Soviet Union in August 1920 in its letter addressed to “all organisation of the Communist Party of Turkestan” stressed the paramount need to urgently bring about “basic changes in the agrarian policy” in Central Asia (Kaushik 1970: 233). Lenin further urged upon “the Communists of Turkestan” in 1920 to wipe out all traces of Russian imperialism (ibid). Thus land and water reforms
were carried out in two stages, 1921-22 and again 1925-28 (Sharma 1979: 104 & 112). In early 1920s, the Soviet government distributed the private land of landlords, merchants, and moneylenders to the poor peasants. Lenin showed the way to gradual co-operation of small farmers. It began with the simplest forms of co-operation, i.e., consumer’s co-operatives were organised to sale farm produce, supply of goods for peasants and initiation of an agrarian credit system. Gradually producer’s co-operatives, large collective firms equipped with machines and employing the latest farm methods were established. Higher types of co-operatives were the credit and marketing co-operatives. It received easy-term credits from the state and distributed them among its members. It was bitterly opposed by the Kulaks, bais and moneylenders.

Industry: The Soviet government took many policy decisions concerning the economic development of Central Asia, which directly and indirectly promoted industrial development. The Twelfth Congress (1923) called for the elimination of inequalities between the nationalities by raising the economic level of the backward people. To overcome the economic and cultural backwardness, huge capital outlays and a large number of highly skilled specialists were needed. The financial assistance given to the Central Asian region by the Soviet government was crucial for their economic development. There were years when the Soviet Union subsidies covered 80-90 percent of the expenses of the some of the Central Asian Republics (Kaushik 1970: 214). Central Asia was also supplied with technical equipment and machines for industrial enterprises.

Pre-War Plan Period (1928-41)

Since 1926, GOSPLAN had been working on formulating Five Years Plans (FYPs) of economic development and produced several variants, based on different rates of growth and different proportions of heavy (basic) and light (consumer) industry. In October 1927, the Party Congress voted for the formulation of a FYP based on rapid industrialisation, as advocated by Stalin.

It was with the First Five Years Plan (1928-1932); the first important stage of industrialisation began in Central Asia. The fourteenth Congress of the Communist Party of the Soviet Union in its directive for formulating the First FYP pointed out that the plan
must give special attention to the question of the pace of economic and cultural development of backward areas (Kaushik 1970: 217). One of the important objectives of the first plan was the attainment of self-sufficiency in cotton for the textile industries of the USSR. The earlier priority given to the regional development was largely ignored in favour of the objective of attaining high rates of national economic growth. The simplest form of agricultural co-operatives and the system of state contracts for farms i.e. state farm concept known as ‘Sovkhoz’, played a huge role in preparing the peasants of Central Asia for transition to socialism. The highest form of agricultural co-operatives was collectivisation, which constituted collective farms known as ‘Kolkhoz’. This was introduced on a large scale in Central Asia. These collective farms were first organised in cotton-growing areas, which was called ‘Tozs’. The second half of 1929 marked the beginning of a mass movement of collectivization in Central Asia. In 1930, ‘Tozs’ were converted to ‘artels’, which were real collective farms. An important role in this transition was played by experimental stations, agro-technical centres and Machine and Tractor Station (MTS).

The Second Five Years Plan (1932-37) had the objective of liquidating all exploiting classes and establishing socialism. In the sphere of industries it was fulfilled in four years and three months and in agriculture the targets were over-fulfilled (Kaushik 1970: 220). The Second FYP paid great attention to the development of heavy industries, like generating electricity, chemical combine; copper melting etc. The country’s wide popular movement for increase in productivity of labour began during the Second Plan period.

Socialist competition was carried on the basis of new production techniques. Technical education and training became widespread during this plan. With socialist industrialisation, the gap in the level of development of central regions of Russia and Central Asia was to a very large extent equalized. The collectivisation of agriculture had been successfully completed by the end the Second FYP in Central Asia.

Regional development issues once again came to the fore front during the Third Five Years Plan (1937-41). With the rise of fascism in Germany, the Soviets became
aware of vulnerability of the USSR, where the bulk of the industries were concentrated. Hence the emphasis was on the shift of industries towards the less developed East.

Collectivisation drive launched during the Soviet rule in Central Asia had its negative impact on the region too. Lenin's idea of collectivisation was more practical as he wanted to introduce it to secure benefits of collective farming. Stalin on the other hand collectivised all the households abruptly. The policy of collectivisation was directed both at the settled farmers and the nomads. Collectivisation of settled farmers was easier. But nomads slaughtered their livestock instead of surrendering them to the collective farms. Hence agricultural output was adversely affected especially livestock.

State farms emerged during the collectivisation period in Central Asia. By the method of intensive agriculture, agricultural production increased. But much of the collective and state farms were engaged in cotton cultivation and few were involved in other agricultural activities. The private auxiliary households were the main contributors of vegetable and livestock products. Cotton became the prime crop in Central Asia as a result of the Soviet policy to increase cotton production in each Plan period.

In the initial stages of Five-Year Plans, the Soviets focussed on those branches of industry, which were considered to be productively effective. Cotton topped their priority list. Their foremost scheme in the initial phase of industrialisation was to develop agro-based industries to stimulate cotton-culture. The Soviets relied on effective utilisation of local resources to develop rational structure of industry. To achieve this goal, planned development and regional economic development went simultaneously. First important stage of industrialisation began in Central Asia with the First Five-Year Plan. The rate of industrial development in Soviet Central Asia during the plan period was faster than the central regions of Russia (Kaushik 1970: 219). The targets of Second Five-Year Plan were achieved and the Soviet rule was successful in liquidating all exploiting classes and to establish socialism (ibid: 220). Development activities were prominent in heavy industries like generating electricity, chemical combine and copper-melting based on electric power, construction of agricultural machine manufacturing units, textile combine, etc. The growth of industrial development was greatly facilitated with the surge in
electric power generation. The second and third five year plan mainly focussed on the development of non-ferrous metallurgy. A beginning was made in the development of chemical industry.

Qualitative change in the structure of industry was visible. Along with cotton textile industries, new industrial enterprises were established. Each Republic was also making efforts to specialise in one or few branches of industry. As a result of Soviet policy of socialist industrialisation and collectivisation of agriculture, the gap in the level of development of the central regions of Russia and Central Asia was reduced. Central Asian people were thus able to achieve economic equality by the end of third five year plan (Kaushik 1970: 242).

**War and Post-War Plan Period (1941-1985)**

German invasion in 1941 broke Soviet resistance. Immediate steps were required to prevent the whole of the industrial potential of Ukraine, Moscow and Leningrad regions from falling into the hands of the axis forces. Much of the engineering industries in the western part of Russia were destroyed to prevent it from falling into enemy hands and several of them were evacuated to the Soviet Central Asian region in the east (Gidadhubli 1992: 132).

The crop pattern was disrupted severely by the outbreak of the war. With the German occupation of much of food surplus areas of the European part of the USSR, it became impossible to supply food to cotton growing and other industrial crop areas, and there was marked increase in subsistence farming, especially in the sowing of grains. About three hundred major metallurgical, textile and agro-industries were shifted from the European parts of the USSR to Central Asia.

But soon after the war, while these industrial areas continued to benefit from the war time shift to east, Central Asia received relatively less attention than had been the case before. One reason was the concentration of resources on the reconstruction of the badly damaged areas of European Russia and Ukraine.
By 1950s, Central Asia already possessed a powerful and modern industrial base. Industrial development diversified and created conditions for the integrated development of this region. This helped the region to be self reliant on fuel, power and machine building base.

Under Khrushchev, construction of large projects and technological progress were encouraged. New factories and plants, mines and electric power stations were commissioned. The machine-tool building industry doubled its output and also improved the quality of its products. The development in machine tool building industry facilitated to increase the output and the capacity of power generating units, chemical and metal making plants. Industrial growth continued and in particular there was a spectacular increase in production of Karaganda coalfield, non-ferrous metals, electric generation and chemical industries in Central Asia. The Soviet government tried to improve the efficiency of economic management and planning. In the latter phases of Plan period, the Soviets combined the achievements of scientific and technological revolution with the advantages of socialist economic system. In this period a number of industries including electronics, radio engineering and instrument making, which manufactured equipment for automation of industrial production, were set up.

One striking feature was the commissioning of computing machines and devices. This marked a beginning of scientific and technological revolution. In machine tool manufacturing, steps were also taken to increase production of automatic and semi-automatic machines. The engineering plants not only made use of existing equipment but constantly installed new machine-tools and other measures were also taken to improve the quality of engineering products. The growth of heavy industries facilitated the process of industrial growth of the 1960s, 1970s and first half of 1980s. But at this time Soviet Central Asia faced a major sectoral imbalance in labour utilization because large-scale industries were facing labour shortages, while light and food industries employed excess labour (Patnaik 1995: 149).

The crop pattern was severely affected by the war. There was increase in subsistence farming, especially in the sowing of grains, which continued till Khrushchev
came to power in 1953. He introduced the ‘Virgin Land Campaign’ in Kazakhstan, which solved the problem of food-grains in Central Asia. He changed Stalin’s taxation policy by making it peasant friendly. He tried to increase livestock rearing. Other policies that helped agricultural output are abolition of the MTS and allowing the collective farms to purchase their own agricultural equipment.

Brezhnev emphasised on the technical efficiency of the collective and state farms as a part of his agricultural reforms. During his time there was mechanisation and chemicalisation of agriculture. Procurement prices introduced by Khrushchev in 1953-55 were continued. In the latter phases of the Plan, scientific methods were adopted to increase productivity and quality of products.

The problem of training of highly skilled agricultural specialists was finally resolved after years of efforts. Central Asia achieved relative success in collectivisation and state farms. The Soviets laid more stress on cotton cultivation in Central Asia. By 1976, the yield per hectare of cotton in Central Asia was the highest in the world (Khan and Ghai 1979: 63). But the Virgin Land Campaign solved the problem of shortage of grains. By facilitating grain farming with irrigation, machines and mineral fertilisers, the production of grain per hectare also increased. There was a noticeable increase in all types of crops till 1984-85, irrespective of bad weather in some crop year (Warikoo and Norbu 1992: 137). Agriculture in Central Asia was dependent on irrigation. The Soviets so developed extensive irrigation projects in the region. They diverted the maximum flow of water to cotton and grain fields. This diversion decreased the volume of river water flowing into the Aral Sea. The sea level declined from 53 metres in the 1960 to 40.3 metre in 1987, the surface area reduced from 67,000 to 41,000 km$^2$ and the volume decreased from 1,604 to 404 km$^3$ (Glazovskiy 1991: 74).

Diversion of water flow also led to other environmental hazards. The days of dust storm increased in the coastal regions and salinisation of soil increased due to extensive irrigation (ibid). With the increase in salt level in the soil, agricultural production per hectare gradually declined. Intensive cultivation of cotton also exhausted the soil. Before the Soviets, crop rotation was the main feature of agriculture in Central Asia. But Soviets
demand for cotton turned Central Asia into the cotton monoculture region. Hence cotton's share of sown acreage reached 85 per cent, which normally should have been between 50 to 60 per cent (Rumer 1987: 84). Continuous plantation with the same crops demanded use of more mineral fertilisers. The use of fertilisers and pesticides also increased as cotton has low immunity to disease and infestation.

These policies had a serious impact on the environment and on the health of the people. The infant mortality rate increased in Central Asia, and the percentage of population having respiratory problems, infections and digestive problems were also on the higher end (Smith 1991: 562).

The position of Soviet citizen of the Central Asian region and of Russia was not equal. Though the earning of the people increased in Central Asia, yet it was lesser compared to other regions of USSR. Collective farm earnings in Central Asia and rest of the country became more or less equal. There was income difference in collective and state farms in different Republics. Sectoral differences also could not be wiped out. Average monthly wage in a collective farm was always below than that of the state farm and at the same time wage in state farm was below than that of industry.


Gorbachev’s 'Glasnost' (openness) and 'Perestroika' (economic and social reforms) policies brought about a sea change in the whole of Soviet Union. Gorbachev believed that more liberalism was the answer to the Soviet Union's economic and social problems.

The Soviet economy was on the decline by the 1980s. Gorbachev believed that the Soviet Union needed a “radical change” and denounced “uneared incomes” (Smitha 2002: 3). To improve quality of the Soviet work force he started an attack on alcohol consumption. He raised the price of alcohol, reduced supplies and the hours of sales. Gorbachev increased the wages of talented scientific and technical personnel by fifty percent to encourage them to perform better. And in August 1985, the salaries of others were adjusted to the quality of their work.
Gorbachev also relied on the efficiency in central planning management. To make economic planning more effective and efficient, new super-agencies were created to oversee economic developments. In October 1985, Gorbachev published his plan to increase production of consumer’s goods and to increase services. He set the target as 30 percent increase by 1990 and an 80 to 90 per cent increase by the year 2000 (Smitha 2002: 3). He estimated that labour productivity in this period would be more than double (ibid). Gorbachev also planned to increase the production of nuclear power by 400-500 percent (ibid).

As part of its entire reform programme, Gorbachev also reduced military spending and focussed on economic development. Grain harvests were good in 1986 and 1987, allowing the Soviet Union to reduce grain imports, but the economy continued to decline (ibid: 4).

Oil sale outside the country declined during this time. The government in order to tackle the crisis reduced the import of consumer goods. Soviet citizens suffered from reduced availability of consumer goods, which also decreased revenues from sales tax. Non-availability of goods in the markets increased the prices of these commodities. The Government was spending more money than it was acquiring in revenue (Deficit Spending), which was a disaster for the Soviet economy. To increase its revenue, the government continued to print more money, leading to inflation. People kept their extra money in state savings banks, which was not good during inflation time. This money was not fruitfully invested. Monetary policy was of little concern to Gorbachev and his advisors (Smitha 2002: 4). New bureaucracies were created to oversee planning and investing at a more local level. Decrees were issued to maintain production quality and on timely completion of projects. Producers’ cooperatives were allowed. Some joint ventures with foreign companies were authorized. But none of these helped to revive the economy.

Private farming was encouraged by offering lands to the farmers. According to the law, the farmers could use the land for farming but had no right to sale it. At that time, few people in the Soviet Union were interested to take up private farming unlike
China (Smitha 2002: 5). Some also could not trust that the government introduced the scheme of private farming as a permanent feature (ibid). By 1987, a number of people took help of the land grant scheme but few could successfully utilise it (ibid). The farmers barely managed to produce for their family and could not meet the demands of the market. Private farming failed to make a substantial progress and the Soviet Union’s agriculture in Central Asia remained largely collective (ibid).

The Soviet economic policy had dual impact in Soviet Central Asia. Kazakhstan as part of it also had to deal with it. Some positive attribute of the Soviet policy was the abolition of feudalism and landlordism, modernisation of agriculture, increase in agricultural and per acreage productivity by increasing the irrigation and mechanisation of agriculture, setting up of various heavy and light industries based on the availability of labour and natural regional resources and increasing the living standard of people, etc. At the same time it had its own demerits too. Excessive use of fertilisers and chemicals negatively affected the productivity and the environment. Heavy reliance on cash crops especially cotton led to the shortage of food grains. Central Asia had to later rely on imported food grains. Collectivisation led to acute shortage of livestock till the beginning of 1950s. But later on, the increase in livestock was remarkable. Most of the industries were located in the Russian part of the USSR. Central Asia lacked light and food industries. The Soviet policy emphasised on the heavy and basic industries. In absolute terms, the standard of living improved. Compared to the other regions of the erstwhile USSR, the Central Asian lagged behind in terms of their earnings and infrastructure.

Economy of Kazakhstan

Before independence, all Soviet Policy towards Central Asia naturally included Kazakhstan. Kazakhstan as part of Soviet Union also faced the impact of Gorbachev’s policies. Prior to independence, the main products of Kazakhstan were agricultural goods, coal and other mineral resources (chromite, crude oil and gas), heavy industrial products (metallurgy, heavy machinery and petro-chemicals), food processing, textiles and footwear. Soviet central planning led to heavy concentration on mining and processing activities. This caused a huge burden on the natural resources of Kazakhstan. Some
scholars argue that “the central authorities’ belief in the importance of scale economies was responsible for many industries that were local or even Union-wide monopolies” (Hoffmann et al. 2001: 6).

A major share of Kazakhstan’s production was exported to western Russia and crude oil for its refineries was imported from Central Siberia. As in the other republics, the Soviet policies left a deep scar on the environment. In Kazakhstan, extensive use of resource-intensive methods of production and the development of pollution intensive heavy industries such as metallurgy, power generation and chemical industries caused environmental degradation (Hoffmann et al. 2001: 5). Moreover, heavy reliance on artificial irrigation to increase cotton production resulted in the collapse of the ecosystem of the Aral Sea. Soviet nuclear testing also contaminated the area (ibid).

Kazakhstan had the highest share of inter-republican total trade. It shared 86 percent of the total trade in 1988 (Hoffmann et al. 2001: 6). Russia was Kazakhstan’s most important trade partner, constituting more than half of its total trade. Within the Soviet system of inter-republican trade, Kazakhstan supplied raw materials to processing factories in Russia and other republics as well as unprocessed and semi-processed agricultural goods and some engineering goods. In return, it received refined petroleum products, processed food, most consumer products and advanced industrial equipment. Kazakhstan during the Soviet time had one of the highest recorded inter-state trade deficits relative to GDP within the Soviet Union (ibid).

The main features of the inter-republican trade were- first, it was part of a system of Union-wide state orders. Production levels and flows of inputs and outputs were imposed by central authorities in Moscow. Enterprises had to trade with state organisations at fixed prices. They also had to meet their delivery targets irrespective of whether payment was received or not (Hoffmann et al. 2001: 6). Trade with the COMECON (Council for Mutual Economic Assistance) and western countries was primarily done on bilateral barter agreements (ibid). Politics determined the sectoral and regional division of labour as well as the level and the terms of trade. Other factors like geographical proximity and the size of markets of the trading partners played secondary
roles. Second, Trade restrictions and lack of incentives discouraged the use of modern technologies in manufacturing of goods. This severely affected the quality of goods. The quality and design of these goods, except for military equipment were inferior to the goods manufactured in western countries (Hoffmann et al. 2001: 7).

In 1991, Kazakhstan met only 42 percent of the domestic requirements in consumer goods (Mohanty 2008: 65). Kazakhstan had a post transfer per-capita income (measured in purchasing power parities) similar to that of Poland and Malaysia (27 percent of USA) in 1987 and per-capita fixed assets were in 1989 around 70 percent higher than in other Central Asian Republics, Ukraine and the Caucasian countries (Hoffmann et al. 2001: 5-6). At the same time it was 20 percent lower than in Russia or the Baltic Republics (ibid: 6). The disturbing factor was that the capital stock lacked modern technological facilities. Kazakhstan had poor infrastructure. It suffered from shortages of equipment and parts, insufficient investment during 1980s, administrative difficulties in planning and construction of an efficient infrastructure and outdated technological standards. Telecommunication sector was also in dismal state. There were only few telecommunication channels that connected Kazakhstan to areas outside of the former Soviet Union (ibid).

The railway, a key facility of the country’s transport system was in bad shape too. It suffered from shortages of spare parts and materials, poor conditions in plant facilities and outdated network facility. The fate of road infrastructure was no better and faced shortages of maintenance equipment.

The social indicators in Kazakhstan were slightly lower than the average of Soviet Union. Kazakhstan had well trained work force. But the main impediment for this work force was the lack of expertise on western technologies and commercial practices (Hoffmann et al. 2001: 5). Adult literacy was high, about 97 percent (ibid). In 1990, the labour force participation rate was 79 percent, which was also high by international standards (ibid). The state accounted for 95 percent of total employment before Kazakhstan started to implement the reforms (ibid).
Central Asia comprises of a large area stretching from Siberia in the north to Afghanistan and Iran in the south (the Hindu Kush mountain range isolates it from Afghanistan and Iran), from the banks of Volga and Caspian Sea in the west to China in the east (Kaushik 1970: 13). The former Soviet Central Asia included five Republics of Kazakhstan, Uzbekistan, Tajikistan, Kyrgyzstan and Turkmenistan. It covered an area of four million square kilometres out of which Kazakhstan alone constituted for 2.7 million square kilometres (ibid).

Geographically, the Central Asian region constitutes a vast landmass of steppes, oases, deserts and mountains. The region is landlocked, which has its own share of advantages and disadvantages. Despite its national diversity, Central Asia has certain homogenous elements in terms of its ethnic, cultural, economic and geographical traits.

Kazakhstan has the Ural River and lower courses of the Volga River to the west, the Ala Tau Mountains to the east, the Western Siberian Plateau to the north, and the Tien Shan Mountains to the south. Primarily located in Asia, a small portion of Kazakhstan is also situated to the west of the Urals in Eastern Europe. The Republic shares its boundary with Russia in the north, the People’s Republic of China in the east, and Kyrgyzstan, Uzbekistan, and Turkmenistan in the south and having water boundaries of Caspian Sea with Azerbaijan, Iran in the west. Kazakhstan and Uzbekistan both share the Aral Sea.

Kazakhstan shares 12,012 km border with different countries (Embassy of the Republic of Kazakhstan in India, 2009c: 2). Kazakhstan’s land borders with its neighbours are- 6,846 kilometres (4,254 miles) with Russia, 2,203 kilometres (1,369 miles) with Uzbekistan, 1,533 kilometres (953 miles) with China, 1,051 kilometres (653 miles) with Kyrgyzstan, and 379 kilometres (235 miles) with Turkmenistan (ibid). With the Caspian Sea it has boundary of almost 1,894 km and 1,070 km with the Aral Sea (CIA World Factbook 2009).

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1 In the Soviet Period, they were being called Republics of USSR but after the disintegration of USSR they became sovereign independent states.
The East-West stretch of Kazakhstan is about 3000 km and the total North-South distance is about 2000 km (Centre for Foreign Policy and Analysis 2002: 6). Kazakhstan is the world’s largest landlocked country. The major cities of the Republic are Astana, Almaty, Karaganda, Shymkent, Atyrau and Oskemen. More than a quarter of Kazakhstan’s territory is occupied with steppes, half with deserts and semi-deserts, and other quarter with mountains, sea, lakes and rivers (Geography of Kazakhstan, 2002).

Kazakhstan can be geographically divided into two parts, the northern part and southern part. The two parts are divided by a vast area of dry and less populated land. Physically and culturally, the northern Kazakhstan shares similarities with western Siberia in Russia while the southern part is closer to the Central Asian region (Lydolph 1964). Kazakhstan is endowed with varied geographical diversity. It includes forest-steppe, steppe, semi-desert and desert. It has both high mountain areas as well as deep depressions (Shuptar 2008: 1). The territory is divided from north to the south by the different nature-climatic zones: steppe-forest, steppe, semi-desert, desert, foothill and mountain zone (Geography of Kazakhstan, 2002).

**Climate**

The entire Central Asian region has extremely varied climatic and natural conditions. Kazakhstan has a continental climate with hot summers and cold winters. Precipitation varies between arid and semi-arid conditions. Kazakhstan has four distinctive seasons—summer, autumn, winter and spring. In Kazakhstan, summers are pleasant with temperatures ranging between 19°C (66°F) and 26°C (79°F) (Embassy of the Republic of Kazakhstan in India, 2006: 5). In winters, the temperature goes down to as much as minus 19°C (-2°F) to minus 4°C (25°F) at night (ibid). The higher altitudes enjoy a slightly warmer winters and cooler summers. Rainfall is heavier, particularly in the east around April-May. Snowfall starts around November and continues till April-May. The average January temperature varies from minus 19°C in the north to minus 3°C in the south (Kazakhstan in Brief, 2000: 3). The lowest temperature in winter sometimes might reach minus 45°C and the summer temperature might go as high as 30°C (Centre for Foreign Policy and Analysis 2002: 7).
Based on climate and economic conditions, the country can be divided into five main zones- Eastern, Northern, Central, Southern and Western Kazakhstan. The Eastern Kazakhstan has a population of about 1.7 million (Kazakhstan in Brief, 2000: 4). Semipalatinsk, Oskemen and Zyrianovsk are the three main cities of the eastern Kazakhstan. The region is rich in polymetal ores, containing lead, zinc, copper, gold and silver (ibid). The main industrial branches are metallurgy and production of heavy machinery, nonferrous metallurgy, machine-building, timber cutting, etc (ibid).

Northern Kazakhstan is the 'granary hub' of the country (Kazakhstan in Brief, 2000: 4). About three quarters of the agricultural land is used for grain production (ibid). The useful minerals found in the region are iron ores, hard coal, limestone (ibid). The major industries include machine-building, instrument and food-processing (ibid).

The central Kazakhstan region covers a total area of 398 square km (Kazakhstan in Brief, 2000: 4). Karaganda, Dzeskazgan and Temirtau are the main cities of the region. More than 80 percent of the population of central Kazakhstan live in the cities (ibid). About 30 percent of the Republic's hard coal stocks are concentrated in Central Kazakhstan (ibid). The region has some highly developed industries of ferrous and non-ferrous metallurgy, chemical industry, construction industry, etc.

The least developed among these five regions is the southern Kazakhstan. It also has the highest density of population. The main cities are Almaty, Kyzylorda, Aralsk and Taraz. The region is the main centre of irrigated viticulture, with well-developed cotton, sugar, beet and rice growing areas.

Western Kazakhstan is rich in mineral resources, such as oil, gas, chromite and copper. The Tengiz oil-field, one of the largest in the world is located in this part of Kazakhstan. Because of its rich natural resources it has attracted lot of foreign investments.
Mountains

The Central Asian region consists of folded mountains and is seismically one of the most active areas in the world. Less than ten per cent of the Kazakh territory is covered by mountains; mainly located in the south, the south-east and the east. The Tien Shan is an important mountain system in this region. It is an extensive, geologically complex group of high mountain ranges. Between the ranges are mountain basins, which are generally flat and characterised by steppe or desert conditions. There are many large glaciers in the high catchment zones of Tien Shan. The Tien Shan alone has 10,200 sq. kilometres of glaciers (Sinnott, 2003). Some of the important mountain peaks lie in this region. In Kazakhstan the Tien Shan Mountain lies in the south-eastern part. Han Tengri Peak located in the south of Kazakhstan is the highest point in the country, which is at 6,995 metres (Embassy of the Republic of Kazakhstan in India, 2006: 5). It borders Kyrgyzstan and lies in the Saryzhaz range of the central part of the Tien Shan. This mountain peak is revered by the Turkic people. Other ranges in the Tien Shan system include the Zailyiskii Alatau in northern Tien Shan, whose highest peak is Talgar (4973 m); the Kyrgyz range; the Barlyk, the Djungar Ala-Tau, the Ili Ala-Tau, the Talas Ala-Tau; the Karatau; and the Ketmen (Shuptar 2008: 1). The Kazakhstan mountain system is rich in mineral resources, making it lucrative for developing resort-sanatorium business. The numerous glaciers located in these mountains are the source of water for majority of the rivers in Kazakhstan.

North of the Tien Shan is the Jungar Alatau. Its highest peak is Semenov-Tienshanskii, at 4662 m (Shuptar 2008: 1). The Saur and the Tarbagatai mountain ranges lay in the north-east of the Jungar Alatau between lakes Alakol and Zaisan. The height varies between 2,000 and 3,000 m (ibid). The Altai Mountains lie in the north-eastern part of the region. Of these, the south Altai and part of the Rudnyi are on Kazakh territory. The average height is between 2,500 and 3,500 m (ibid). The biggest of the Altai Mountains on Kazakh territory is Belukha, which borders with Russia. Its summit is 4506 m high (ibid). The Kazakh Melkosopochnik or Saryarka, the Mugojar mountains separating the Turgai plateau from the Prikaspiiskaya plain and the Mangystau mountains are some other mountains of Kazakhstan.
The Charyn Canyon is situated on the Charyn River in Kazakhstan. The Charyn River Canyon is 150-300 metres deep and 154 kilometres long (Embassy of the Republic of Kazakhstan in India, 2009c: 2). It cuts through the red sandstone plateau and stretches along the Charyn River gorge in northern Tian Shan (200 km east of Almaty). The steep canyon slopes, columns and arches rise to heights of 150–300 m. (ibid). The canyon is the home for a rare type of ash tree that is said to have survived the Ice Age (ibid).

Deserts and Steppes

More than three-quarters of the territory in Central Asia is desert low land. Most of Kazakhstan’s land area is covered by plain; either desert, steppe and forest-steppe or semi-desert. Deserts account for 44 percent (167,00,000 hectares) of total land area, semi-desert 14 percent and 26 percent steppe in Kazakhstan (Centre for Foreign Policy and Analysis 2002: 6). Forests occupy 21,000,000 hectares (ibid). The average elevation varies between 200 and 300 m. (Shuptar 2008: 1). Temperature is very high in summer and rare rainfall in the Kazakh desert regions. Severe frosts in the winter, frequent winds causing sand-storms, very dry air and sharp variation of temperature during the summer even within a single day are some of its main characteristics (Geography of Kazakhstan, 2002).

Kyzyl-Kum is the main desert lying in the south of the Kazakh. It lies between the Amu-darya and Syr-darya rivers. It stretches from the Aral Sea to the foothills of the Tien Shan. Other deserts, such as- Betpak-Dala and Moyinkum lie in the south of Melkosopochnik while the southern fringes of the western Siberian plain lie to the north of Melkosopochnik.

The Kazakh Melkosopochnik, or Saryarka, occupies the central part of the Republic’s flatlands. These are open steppe lands with low massifs, which in some places reach the height of 1,500 m. (Shuptar 2008: 1). Moving west from the Kazakh Melkosopochnik, there are the Turgai plateau, the Turan lowland steppe and the Kyzyl-Kum desert. Further westward, these plains descend into the Prikaspiiskaya lowlands. Their elevation varies between 20 and 70 m. below sea level (ibid). But the Karagie depression reaches 132 m. below sea level (ibid). This is the country’s lowest surface
point. In the south-east, the Prikaspiiskaya lowlands rise gradually towards the Ustyurt plateau.

**Soil**

Most part of Central Asia has inorganic soil which is suitable for a variety of crops. Large area of the lower portions of the alluvial fans is spreading out from the mountains towards the northern lowlands of Kazakhstan. These are covered by loess (in Kazakhstan) on which mineral rich serozem soil is found. This is one of the most extensive belts of loess in the world. In some places it reaches thickness of several hundred feet (Lydolph 1964: 185). The loess stands in vertical cliff because of its loosely compacted porous nature and is the ideal soil for farming (ibid).

Kazakhstan has various types of soil. Most of the steppe-forest zone is occupied by dark soils; there is dark-brown soil in the south, also light-brown and brown soils. The soil of deserts and half-deserts is gray type.

**Water Resources**

Central Asia is one of the driest regions of the earth. Irrigation is essential for agriculture. Without irrigation the Central Asian people could only do dry farming in moister areas and grazing in the drier areas.

The river system of Kazakhstan falls into three main groups (Lydolph 1964: 238). In extreme west of Kazakhstan, the Ural and Emba River flow from north to south into the Caspian Sea covering the Aktyubinsk and Uralsk Oblasts. Some rivers rise in Kazakhstan and flow across the Siberian plain. These rivers have relatively little use to

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2 Alluvial fans: When a stream is supplied with more rock waste than it can carry, the excess material is spread along the Central bottom. Fans are built by young streams carrying heavy loads of coarse rock waste out from a mountain or upland region. Where the stream flows out upon the gentle slope of the plain, the current velocity is greatly reduced, thus forcing the stream to deposit. For details, see Arthur N. Strahler, *Physical Geography*, New York and London, 1960, pp.356-57.

3 Loess: In Several part of the world the ground in underlain by deposits of wind-transported silt, which has settled out from dust storm over many thousands of years. The material thus formed is known as loess. For detail, see Arthur N. Strahler, *op cit.*, pp. 440-43.
Kazakhstan. And within the region, a number of major rivers rise in the mountains to the south-east and flow into the Aral Sea or Balkhash Lake or disappear into the desert.

The perennial streams are limited primarily to those whose sources lie in the high mountains and are fed throughout the summer by the melting snows and glaciers. In the south, one such prominent stream is the Syr-Darya, which flows into the Aral Sea. Many smaller streams also flow out of the southern mountains, which are most important for irrigation. These are the Ili and Chu rivers in the south-east.

Kazakhstan has about 8,500 large and small rivers (Centre for Foreign Policy and Analysis 2002: 7). Some of the largest rivers of Kazakhstan are: Irtysh (total length: 4248 km, 1700 km of length lies in Kazakhstan), Syr-Darya (2219 km and 1400 km), Ishim (2450 km and 1400 km), Ural (2428 km and 1082 km), Ili (1001 km and 815 km), Chu (1186 km and 800 km), Tobol (1191 km and 800 km accordingly), Mura (all 978 km in Republic’s territory) (Geography of Kazakhstan, 2002). The Irtysh and its tributaries, the Ishim and the Tobol, flow from south to north and finally reach the Arctic Ocean. The River Ural, traditionally regarded as one of the boundaries between Europe and Asia, flows into the Caspian Sea (Shuptar 2008: 2). The River Ili, flowing into Lake Balkhash, is one of the many rivers that give the area the epithet “Semirechiye” (Zhetsus in Kazakh), which means the ‘land of seven rivers’ (ibid). The Syr-Darya flows into the Aral Sea. Charyn River is another major river in the east.

Besides the river system in Kazakhstan, the two major inland seas are the Caspian Sea and the Aral Sea. In the West and Southwest of Kazakhstan lies the Caspian Sea. It stretches from Great Russian River Volga to the gulf of Kara-Bogas-Gal in Turkmenistan. This covers a distance of 2340 km. (Centre for Foreign Policy and Analysis 2002: 7). This is the largest lake in the Earth. Though landlocked, the Caspian Sea is so called because of its size. In Kazakhstan’s territory, the Ural, Ilek and Emba Rivers flow to the Caspian Sea. Since 1978, there is a huge rise of Caspian’s sea level with average height of 13-14 cm. per year (Geography of Kazakhstan, 2002). The sea level has grown for 2.5 metres since 1978 (ibid). As a result of it, the coastal line has moved closer for 20-40 km. (ibid).
Aral Sea is the fourth largest lake in the world. The north-eastern half of the Aral Sea is in Kazakh territory. Syr-Darya River feeds Aral Sea throughout the year. The area of the Aral Sea was more than 65,000 sq. km. at the beginning of the 20th century (Shuptar 2008: 2). By 1964, its surface area reduced to almost 25,000 square miles and comparatively shallow depths of 30 to 60 feet throughout much of its extent (Lydolph 1964: 180). Now its area has gone down further. During 1960-1980’s, the fresh water inflow through main channels – Amu-Darya and Syr-Darya rivers decreased, and also the water inflow from Chu, Talas and Sary-Su rivers disappeared. The loss of water from the Aral Sea poses serious ecological threat to Kazakhstan and in general to Central Asia.

There are about 48,000 lakes in Kazakhstan (Centre for Foreign Policy and Analysis 2002: 7), covering an area of more than 45,000 sq. km. (Shuptar 2008: 2). Besides the Caspian and Aral Seas, there are four large lakes, namely Balkhash, Alakol, Zaysan and Tengiz. Lake Balkhash is situated in the sands between central and south-eastern Kazakhstan and covers an area of about 18,200 sq. km. (ibid). Half of its water is fresh and half is salty. Further east there are two more large lakes: Alakol and Zaysan. Lakes Tengiz and Korgalzhyn are in Central Kazakhstan. North Kazakhstan, which has the largest number of lakes, is known as the “lake region” (ibid).

Natural Resources

Nature has blessed Kazakhstan with rich natural resources. The vast reserves of hydrocarbon and minerals are the backbone of the Kazakh economy. Around 99 elements of Mendeleev’s Periodic Table of 110 elements are available in Kazakhstan (Embassy of the Republic of Kazakhstan in India, 2006: 7). The proven recoverable oil reserves of Kazakhstan are 30 billion barrels and potential reserves are about 100-110 billion barrels (Umarov 2008: 15). According to BP Statistical Review of World Energy (June 2009), by the end of 2008, Kazakhstan’s proven reserves accounted for of 39.8 billion barrels (5.3 billion tonnes) of oil and 1.82 trillion cubic metres (64.4 trillion cubic feet) of gas. Once the new oil field in Kashagan starts producing, Kazakhstan will become one of the top oil-producing nations in the world. The field is estimated to have 13 billion barrels of recoverable oil reserves (Umarov 2008: 15). However, the Republic still lacks refineries.
There is only three refineries- Atyrau, Pavlodar, and Shymkent. These are not capable of processing the total crude output. According to BP Statistics (June 2009), Kazakhstan produced 72.0 million tonnes of oil and 30.2 billion cubic metres of natural gas in 2008.

Kazakhstan is rich in uranium and second largest country in uranium reserves, accounting for 15 percent of world recoverable uranium reserves in 2007 (World Nuclear Association, 2009a). However, the Kazakh government claims that Kazakhstan accounts for about 25 percent of the world’s uranium reserves (Umarov 2008: 15). By 2018 uranium production in Kazakhstan is expected to rise to 30,000 tonnes, making it the largest producer in the world (World Nuclear Association, 2009b). It also ranks first in barite and tungsten; second in chromite and phosphate rock; third in copper, lead and zinc; sixth in reserves of gold; and eighth in iron ore and coal (Umarov 2008: 15). Kazakhstan stands seventh in terms of its oil stockpile and sixth in gas reserves of three trillion cubic metres (ibid). Kazakhstan possesses 90 percent of the chrome, 50 percent of the silver and 7 percent of the gold of the entire former Soviet Union (Butler et al. 1993: 1).

People and Religion

Ethnically, the majority of the people inhabiting in Central Asia, including the steppe region are Turks. There are also Iranian ethnic people occupying mainly the mountain areas in the south and its adjacent plains. The Uzbeks, Kyrgyz, Kazakhs, Turkmens and Kara-kalpaks all belong to the Turkic group. Iranians who constitute a small portion includes the Tajiks.

The nomads, mostly Turkic, occupied the steppe region. These nomads frequently raided the sedentary population located in the oases of the southern regions (Sharma 1979: 2). Many of these nomads gradually settled there and accepted the peaceful, regular mode of living (ibid). This process of the nomads finding permanent land settlements was further accelerated after the Russian conquest of the region. With Russia coming to the region, another ethnic element was added to the indigenous local population- the Slavs, which comprised the Russians, Ukrainian and Bylorussian nationalities. Inter-breeding of
diverse ethnic groups had been a significant feature of the socio-cultural life of the region (ibid).

The earlier conquest of the region by Arab Muslims had a far-reaching influence. It led to the spread of Islam in this region. Historian V.V. Barthold described that the "sedentary in Central Asia regarded itself as being Muslim at first and then as inhabiting a town or definite region" (Sharma 1979: 2). The region and its people presented a picture of what is called a large 'ethnological museum' (ibid).

Kazakhstan is one of the most multinational, multi-confessional, multiethnic countries in the world due to its 'dynamics of demographic processes and migration' (Embassy of the Republic of Kazakhstan in India, 2008b: 4). Approximately about 130 ethnic groups live in Kazakhstan (ibid). At the time of independence, Kazakhstan had a population of about 17 million: 43 percent were Kazakh, 37 percent Russian and 20 percent were comprised of more than 100 ethnic groups. (Hoffmann et al. 2001: 5) According to the 1999 census of Kazakhstan, the Kazakhs constitutes 53.4 percent, Russian 30 percent, Ukrainian 3.7 percent, Uzbek 2.5 percent, German 2.4 percent, Tatar 1.7 percent, Uyghur 1.4 percent and others 4.9 percent of the population (Senapati 2008: 85). The July 2006 data shows the percentage of the different ethnic population in the country as Kazakh (58.9 percent), Russian (25.9 percent), Ukrainian (2.9 percent), Uzbek (2.8 percent), Uighur, Tatar, and German (1.5 percent each) and other groups (4 percent) (Embassy of the Republic of Kazakhstan in India, 2008b: 4).

Followers of 46 religious denominations are present in the Republic. Muslims make up 65 percent of the total population, along with Russian Orthodox (30 percent), Catholic (4 percent), Protestant (less than 1 percent) and other religions (0.1 percent) (Embassy of the Republic of Kazakhstan in India, 2006: 7).

Kazakhstan is a multilingual country. But Kazakh and Russian languages are mainly used. Kazakh is now declared as the state language, spoken by more than 60 percent of the population (Embassy of the Republic of Kazakhstan in India, 2006: 7). Russian continues to be used routinely for general and business communication.
Kazakhstan now is actively promoting the use of English as the language of international affairs and business.

**Agricultural Belt**

Though most part of the Central Asia is arid, some part of the region is conducive for agriculture. In the middle ages, the region witnessed several invasions and some external settlers settled in the territory starting agriculture in the region (Lydolph 1964: 249).

Kazakhstan is suitable for dry farming in the steppe part of Altai. In the south, the foothills called Semirechye are watered by several medium-size rivers originating in the mountains, making it suitable for agriculture and irrigated farming. In the west Siberian Steppe and the desert parts of Central Kazakhstan, lies the greater part of the famous Virgin Land, which was developed for cultivation in 1950s. Almaty region is known for its apple orchards, sugar fields, tobacco plantations, etc. In Kazakhstan, agricultural land lies along the Urals and between the towns of Uralsk and Guryev.

One third of the country is occupied by the Kazakh Steppe (Embassy of the Republic of Kazakhstan in India, 2009c: 2). It covers an area of around 804,500 square kilometres (310,600 sq. miles) and is the world’s largest dry steppe region (ibid). The steppe is characterized by large areas of grasslands and sandy regions.

Agricultural land occupies more than 846,000 square kilometres (Embassy of the Republic of Kazakhstan in India, 2009c: 4). The available agricultural land consists of 205,000 square kilometres of arable land and 611,000 square kilometres of pasture and hay land (ibid). The land use in Kazakhstan in 2005 was as follows- arable land: 8.28 percent, permanent crops: 0.05 percent, and other: 91.67 percent (CIA World Factbook 2009). The total irrigated land was 35,560 sq km in 2003 (ibid).

The chief livestock products of the country are dairy products, leather, meat, and wool. The country’s major crops include wheat, barley, cotton, and rice. Kazakhstan is the sixth largest producer and the seventh largest exporter of grain in the world (Embassy of the Republic of Kazakhstan in Japan, 2009). Wheat accounts for approximately 90
percent of Kazakhstan's annual grain production (ibid). Wheat is the main export item and is a major source of hard currency for Kazakhstan. In 2009, 22 million tons of grains were produced, making 2009 the second best harvest in the last five years (ibid). In 2007, 22.3 million tons of grains were produced in Kazakhstan (ibid). The year 2009 also witnessed an increase in area used for grain cultivation. The area under grain production increased to 17.2 million hectares out of which 14.7 million hectares were used for wheat in 2009 (ibid). Compared to 2008, there was an increase of 1 million hectares of land used for grain cultivation in 2009 (ibid). Kazakhstan also produces wine in the mountains to the east of Almaty, though in small quantities. Kazakh agriculture still suffers from many environmental problems resulting from mismanagement during the Soviet Union.

Kazakhstan is considered to be the original home for apple varieties like 'Malus domestica', 'Malus sieversii'. In local dialect, these apples are known as 'alma'. The Almaty region is rich in apples of these varieties and it is said the city, Almaty got its name from it. The word Almaty means 'rich with apple'. These apple trees still grow wild in the mountains of Central Asia in southern Kazakhstan, Kyrgyzstan, Tajikistan, and Xinjiang in China.

**Government**

Kazakhstan is a constitutional Republic with Presidential Parliamentary form of government. The President is the head of state and Commander-in-chief of the Armed Forces. President Nursultan Nazarbayev has been the President since independence. He was re-elected for another 7-year term in the 2005 Presidential election and the next Presidential election is schedule for 2012.

The Constitution also provides for the office of the Prime Minister. The Prime Minister chairs the Cabinet of Ministers and serves as Kazakhstan’s Head of Government. The country has a bicameral Parliament consisting of the Upper Chamber – Senate (47 seats) and the Lower Chamber – Majilis (107 seats). Two senators are selected by each of the elected Assemblies of Kazakhstan’s 16 Principal Administrative Divisions (14 regions, along with the cities of Astana and Almaty). The President appoints the remaining 15 senators. Single mandate districts popularly elect the members of Majilis.
According to the latest constitutional amendments in May 2007, a part of Presidential powers have been shifted to the Parliament. The number of seats in the Majilis increased from 98 to 107 with 9 seats to be given to the members of the Assembly of People of Kazakhstan in 2008, which is a body representing different ethnic minority groups in the Legislative body (Embassy of the Republic of Kazakhstan in India, 2009c: 1). There are 11 political parties (Embassy of the Republic of Kazakhstan in India, 2006: 6). The last Senate election was held in October 2008 and the next one is to be held in 2011. Kazakhstan practices an indirect method of election to the Senate. The last election to the Majilis was held on 18 August 2007 and the next election is schedule for 2012.

Provinces

Astana is the capital of Kazakhstan. The earlier capital was Almaty, which was shifted to Astana on 10 December 1997. Administratively Kazakhstan comprises of 14 oblasts (provinces) and two municipal districts (Astana and Almaty). There are 84 cities and towns of which 39 refer to those of Republican and regional subordination, 159 districts, 241 settlements, 2,042 aul (rural) settlements. The table and map below give the details of the provinces.
### Table- 1.1

**Provinces of Kazakhstan**

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Capital</th>
<th>Area (km²)</th>
<th>Population (at the beginning of 2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akmola Oblast</td>
<td>Kokshetau</td>
<td>146,200</td>
<td>747,447</td>
</tr>
<tr>
<td>Aktobe Oblast</td>
<td>Aktobe</td>
<td>300,600</td>
<td>703,660</td>
</tr>
<tr>
<td>Almaty Oblast</td>
<td>Taldykorgan</td>
<td>224,000</td>
<td>1,643,278</td>
</tr>
<tr>
<td>Atyrau Oblast</td>
<td>Atyrau</td>
<td>118,600</td>
<td>490,369</td>
</tr>
<tr>
<td>East Kazakhstan Oblast</td>
<td>Oskemen</td>
<td>283,200</td>
<td>1,417,384</td>
</tr>
<tr>
<td>Karaganda Oblast</td>
<td>Karaganda</td>
<td>428,000</td>
<td>1,342,081</td>
</tr>
<tr>
<td>Kostanai Oblast</td>
<td>Kostanai</td>
<td>196,000</td>
<td>894,192</td>
</tr>
<tr>
<td>Kyrgyz Oblast</td>
<td>Kyzylorda</td>
<td>226,000</td>
<td>632,234</td>
</tr>
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<td>Mangistau Oblast</td>
<td>Aktau</td>
<td>165,600</td>
<td>407,403</td>
</tr>
<tr>
<td>North Kazakhstan Oblast</td>
<td>Petropavlovsk</td>
<td>98,000</td>
<td>653,921</td>
</tr>
<tr>
<td>Pavlodar Oblast</td>
<td>Pavlodar</td>
<td>124,800</td>
<td>746,454</td>
</tr>
<tr>
<td>South Kazakhstan Oblast</td>
<td>Shymkent</td>
<td>117,300</td>
<td>2,331,505</td>
</tr>
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<td>West Kazakhstan Oblast</td>
<td>Oral</td>
<td>151,300</td>
<td>615,310</td>
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<td>Zhambyl Oblast</td>
<td>Taraz</td>
<td>144,300</td>
<td>1,018,845</td>
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<tr>
<td>Astana city</td>
<td>Astana</td>
<td>700</td>
<td>602,684</td>
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<tr>
<td>Almaty city</td>
<td>Almaty</td>
<td>300</td>
<td>1,324,739</td>
</tr>
<tr>
<td>Baikonur*</td>
<td>Baikonur</td>
<td>57</td>
<td>70,000</td>
</tr>
</tbody>
</table>

* In 1995, the Governments of Kazakhstan and Russia entered into an agreement whereby Russia would lease for a period of 20 years an area of 6,000 sq km enclosing the Baikonur space launch facilities and the city of Bayqongyr (Baikonur, formerly Leninsk); In 2004, a new agreement extended the lease to 2050 (CIA World Factbook 2009).


Map-1.3
Provinces of Kazakhstan


In terms of population figures, the cities of Kazakhstan are subdivided into several categories: (Embassy of the Republic of Kazakhstan in Israel, 2009a)

- Cities having 300-400 thousand residents (Karaganda, Shymkent, Pavlodar, Taraz, Ust-Kamenogorsk);
- Cities with 200-280 thousand residents (Uralsk, Temirtau, Kostanay, Aktobe, Petropavlovsk, Semipalatinsk);
- Cities with 110-160 thousand residents (Zhezkazgan, Yekibastuz, Kyzylorda, Aktau, Kokshetau, Atyrau).

There are several other cities with population less than 50,000 in Kazakhstan. The currency is Tenge, which was introduced on 15 November 1993. One Tenge is equal to 100 Tyins (smaller denominations of the monetary unit).
Transportation and Communication

All major transportation routes – railways lines, roads and pipelines – connect Kazakhstan with Russia, a Soviet legacy. Earlier high mountain ranges in the south and the east of Kazakhstan and the other Central Asian Republics obstructed developing land connectivity with China, India, Afghanistan and Iran.

Kazakhstan does not have an extensive road system. About two-thirds of the country’s roads are paved. Buses and trains are the common modes of transportation. The railways link major cities in Kazakhstan with the urban regions of Russia, China, and other neighbouring countries. The main rail hub and site of Kazakhstan’s main airport is Almaty. Kazakhstan has two ports on the Caspian Sea- Aqtau and Atyrau. Major cities in Kazakhstan are well connected by airlines.

International Relations

Kazakhstan has established diplomatic relations with most of the countries. About 70 foreign diplomatic missions and offices are accredited in Kazakhstan, and Kazakhstan has more than 50 embassies and diplomatic missions abroad (Embassy of the Republic of Kazakhstan in India, 2006: 6). Kazakhstan has stable relationships with all of its neighbours and is a member of 64 international organisations, which includes the United Nations, Organisation for Security and Cooperation in Europe (OSCE), Euro-Atlantic Partnership Council, and Organisation of the Islamic Conference (OIC). Kazakhstan in 2010 took over the chairmanship of OSCE, adding to its international and regional prestige. Kazakhstan is the first former Soviet Republic and the first Muslim country to hold the post. It is an active participant in the North Atlantic Treaty Organisation’s (NATO) Partnership for Peace Programme. Kazakhstan is also a member of the Commonwealth of Independent States (CIS), the Economic Cooperation Organisation (ECO), and the Shanghai Cooperation Organisation (SCO) along with Russia, China, Kyrgyzstan, Tajikistan and Uzbekistan.

The transition from Soviet Socialist model to market economy in Kazakhstan was not easy for Kazakhstan. The subsequent chapters will discuss the process of economic
transition and reform measures and also the impact of the economic policies initiated by the Kazakh government on the economy as a whole.

**OBJECTIVES OF THE STUDY**

a) The study makes a critical appraisal of the impact of Soviet disintegration on the economy of Kazakhstan.
b) It reviews the process of economic transition in Kazakhstan.
c) The study analyses the reform process in Kazakhstan.
d) It analyses the impact of reform on industrial development in Kazakhstan.
e) The study analyses the impact of reform on agricultural development in Kazakhstan.
f) It examines the role of energy and mineral resources in the economic development of Kazakhstan.
g) The study also analyses the impact of economic reform on the society in Kazakhstan.

**HYPOTHESES**

- Disintegration of Soviet Union had an adverse impact on the economic situation in Kazakhstan.
- Kazakhstan faced various problems like inflation, unemployment, low production, etc. during its economic transition from centrally planned economy to market oriented economy. From 1995 onwards, Kazakhstan’s economy has stabilised and from 2001 onwards it has registered progress.
- The existence of vast energy and mineral resources in Kazakhstan have ensured the steady progress and development in Kazakhstan.
DATA BASE AND METHODOLOGY

The proposed research is descriptive and analytical based on a wide range of primary and secondary sources. The primary sources of data include government documents viz. the literature from different Ministries of the Republic of Kazakhstan, Agency of Statistics of the Republic of Kazakhstan, the official websites of the Embassies of the Republic of Kazakhstan in different countries and other relevant government websites. Data available with various international organisations were also consulted in the 'primary sources' category to augment the resources and to further strengthen the study. Reports and data from international organizations like World Bank, IMF, ADB, etc have been used to justify the study. For data and other relevant information on natural resources, information was used from sources like BP Statistics, EIA, International Crisis Group Report, CIA World Factbook and World Nuclear Association. The secondary sources comprising of books, journals, articles, news reports, etc. have also been surveyed. Besides, internet resources have been carefully and thoroughly examined for better analysis. Simple statistical tools have been used for better understanding and to get logical conclusions.

A field trip to Kazakhstan for one month (28th April - 27th May, 2009) was conducted to collect relevant materials, both primary and secondary sources. The visit gave me the opportunity to interact with various experts working on this area. My interactions with Professors and research scholars helped me to have an in depth understanding of the subject and accordingly refine my work. In addition, the trip helped me to access relevant literatures from the various libraries of Universities and Institutes in Kazakhstan. Moreover, a first-hand understanding of the Kazakh economy and the people benefited the study.
Several scholars have described the geographical features of Kazakhstan. *Kazakhstan in Focus: Ten Years of Independence* of the Centre for Foreign Policy and Analysis (2002) (Almaty) gives details of the geographical features like location, territory, size, borders, etc., of Kazakhstan. It elaborates the physical features like steppes, deserts, rivers, lakes, population, mineral, oil, gas reserves, etc. Nove, Alec and J. A. Newth (1967) have also described these geographical features in their *The Soviet Middle East: A Model for Development?* (London: George Allen and Union ltd.). Lydolph, Paul E. (1970) geographically divides Kazakhstan into two parts on the basis of dryness and population in *Geography of USSR* (London: John Willey). He further adds different types of soils of Kazakhstan in his study.

Economic Transition


The features and impact of economic transition on Central Asian countries have been discussed by Sharma, R. R. (1995) in “Paradoxes of Transition” in K. Warikoo (ed.) *Central Asia: Emerging New Order* (New Delhi: Har-Anand Publications). He focuses mainly on the problems of labour, industrialization, etc. He further adds various economic unions of Kazakhstan with Russia and CIS during the initial periods of President Nazarbayev. Trushin, Eskender and Eshref Trushin (2000) in “Basic Problems of Market Transition in Central Asia” in Boris Rumer (ed.) *Central Asia and the New Global Economy* (New York: M. E. Sharpe) have pointed out the common problems relating to market transition from centrally planned to market oriented economy. They portray the policies undertaken to achieve structural changes and economic stabilization. They further analyse various barriers and difficulties to economic growth.

Gidadhubli, R. G. (1995) in “Economic Transition: Issues and Problems” in K. Warikoo (ed.) *Central Asia: Emerging New Order* states the economic position of all five Central Asian countries and describes various problems like inflation, unemployment, etc. He further adds the effects of economic reforms on the transition of the economy. This point has been reinforced by Patnaik, Ajay (1995) in “Transition to a Market Economy” in K. Warikoo (ed.) *Central Asia: Emerging New Order*. He highlights the economic situation of Central Asia during Soviet period and how they changed by Perestroika. He examines privatization, price rise and reduction of subsidies.


Economic Reforms

Pomfret, Richard (2002) in Constructing a Market Economy: Diverse Paths from Central Planning in Asia and Europe (UK: Edward Elgar) points out various elements of economic reforms in general. He also discusses the key features of economic reforms like price liberalisation and enterprise reform. He also describes the sequence and intensity in implementing the economic reforms.


has been reinforced by Khasanova, Markhamat (1998) in “Kazakhstan: Foreign Trade Policy” in Boris Rumer and Stanislav Zhukov (eds.) *Central Asia: The Challenges of Independence* (New York: M. E. Sharpe). He deals with the integration of Kazakhstan’s economy into world economy, foreign trade balance and regional structure of foreign trade of Kazakhstan. Esentugelov, Arystan (1998) in “Kazakhstan: The Prospects and Perils of Foreign Investment”, in Boris Rumer and Stanislav Zhukov (eds.) *Central Asia: The Challenges of Independence* points out the investment crisis and massive debts in Kazakhstan due to the selling of strategic enterprises to foreign farms. Lastly, Olcott, Martha Brill (2005) in *Central Asia’s Second Chance* (Washington D.C.: Carnegie Endowment Book) has extensively focussed on the implementation of economic policies since 2001. She has discussed the processes of economic reforms and its effects on various sectors. She states that development of Kazakhstan has mainly concentrated on the oil sector. She also suggests that there is need for diversifying the country’s economy to provide long-term prosperity.


“Kazakhstan’s Economy: Perspectives on Regional and Global Integration” in *Himalayan and Central Asian Studies* (12(3-4): 84-103) highlights the macroeconomic reforms in Kazakhstan. He explains the change in GDP structure and indicates the important economic reform measures undertaken in the Republic. He also deals with the role of oil revenues in improving Kazakhstan’s budgetary revenues.

**Industrial Development**

The mineral resources of Kazakhstan including energy resources have been discussed comprehensively in “2006 Minerals Yearbook: Commonwealth of Independence States” (September 2009) of U.S. Geological Survey. It also highlights the structure of the mineral industries, volume of production of different minerals, the companies engaged in extraction of various minerals and the companies engaged in production of various finished products from these minerals in Kazakhstan. *Mining in Kazakhstan* of Mbendi Information Services discusses the availability of different types of minerals in Kazakhstan, volume of production from these mines and the companies engaged in exploration of minerals in Kazakhstan. *Kazakhstan Encyclopedic Reference Book* of the Government of Republic of Kazakhstan (Almaty: 2007) discusses about mineral resources in Kazakhstan. It describes de-monopolization and privatization processes in Kazakhstan, particularly the privatization of manufacturing industries, processing industries and consumer services. It also gives an account of mining and metallurgy industries, processing industries and companies engaged in mining and metallurgy industries in the Republic.

The impact of reforms on industry has been elaborately studied by several scholars. Among them, Zhukov, Stanislav (1996) in “Economic Development in the States of Central Asia”, in Boris Rumer (ed.) *Central Asia in Transition: Dilemmas of Political and Economic Development* has shown the decline in industrial production from 1992 to 1995 in percentage. He describes the factors which are responsible for decline in output. United Nations Industrial Development Organization’s (1996) *Industrial Development Review Series on Kazakhstan* (London) discusses various industrial policies undertaken by Kazakh government. It also provides the production
level of different branches of industry. The Iron and Steel Industry of Kazakhstan has been studied by Sagers, Matthew J. (1996) in “The Iron and Steel Industry in Russia and the CIS in the mid-1990s” in *Post-Soviet Geography and Economics* (37(4): 195-263). He highlights the production and consumption of iron and steel, and their export to other countries. Iwasaki, Ichiro (2000) in “Industrial Structure and Regional Development in Central Asia: A Micro-data Analysis on Spatial Allocation of Industry” in *Central Asian Survey* (19(1): 157-183) describes the sectoral composition of industry like electricity, fuel, ferrous and non-ferrous metallurgy, chemicals, food industry, etc. He further adds major industrial enterprises groups of Kazakhstan with their main economic spheres. The privatization of industry and foreign direct investment has been observed by Olcott, Martha Brill (2002) in *Kazakhstan: Unfulfilled Promise* (Washington D.C.: Carnegie Endowment for International Peace). She tries to reveal the truth behind the foreign direct investment in industry i.e. how they are dragging the resources and profits from Kazakhstan to their respective countries.


*Kazakhstan for Years of Independence: Informational and Analytical Compendium* (2006) of Agency of Statistics of the Republic of Kazakhstan discusses the main economic indicators of industry and structure of industries in the Republic of Kazakhstan. It provides the volume of production of different types of mining industries
and manufacturing industries in the Republic. It also mentions the production and
distribution of electricity, gas and water industries in Kazakhstan. *Central Eurasia 2005:
Analytical Annual* (2006) of Institute for Central Asian and Caucasian Studies (Sweden;
CA&CC Press) analyses the industrial growth of Kazakhstan during 2000-2005. It
highlights the sectoral composition of industry and share of industry in the total amount
of FDI inflows to Kazakhstan. Erlan Kylbaev (2007) in “The Influence of Foreign Trade
Policy on the Diversification of Industry” in Boris Rumer and Lau Sim Yee (eds.)
*Central Asia and South Caucasus Affairs: 2006* has discussed the structure of industrial
production, import and export structures of industrial goods and implementation of export
oriented trade policies in Kazakhstan. He also highlighted the changing pattern in FDI
inflows to different sub-sectors of Kazakh industry during 1996-2005.

**Agricultural Development**

Werner, Cynthia Ann (1994) in “A Preliminary Assessment of Attitudes towards the
Privatization of Agriculture in Contemporary Kazakhstan” in *Central Asian Survey*
(13(2): 295-303) examines the role of agriculture in the Kazakh economy and trends in
agricultural reforms. Asian Development Bank’s (November 2001) *Program
Performance Audit Report on the Agriculture Sector Programme (Loan 1406-KAZ) in
Kazakhstan* describes the objectives and policy measures executed to reform agricultural
sector under the Agriculture Sector Programme (ASP). It highlights the implementation
process, performance and results of the programme. Agricultural reform and development
of agriculture of Kazakhstan has been studied by Abhishev, Adel E. (et al.) (2002) in
*Kazakhstan in Focus: Ten Years of Independence*. It focuses on the development of
agricultural processing industries, creation of a large state corporation for agricultural
goods and land reforms. Nurskenova, Assel (2004) in “Kazakhstan has high hopes for
agricultural reform” in *EurasiaNet Business & Economics* highlights reform measures
undertaken in agricultural sector in Kazakhstan. Ministry of Agriculture of the Republic
of Kazakhstan (2007) in “AgroIndustrial Complex of the Republic of Kazakhstan”
mentions the ‘Strategy of Steppe Plant Cultivation’ and diversification of agriculture in
Kazakhstan.
UNDP (2002) reports on Kazakhstan, *Rural Development in Kazakhstan: Challenges and Prospects* (Kazakhstan), give summary of rural development and discuss various approaches to agricultural development. Zhukov, Stanislav (2000) in “The Economic Development of Central Asia in the 1990s” in Boris Rumer (ed.) *Central Asia and the New Global Economy* focuses on the decline in industrial and agricultural output, GDP and investment in Kazakhstan. He highlights the major structural changes and decreases in per capita GDP of Kazakhstan till 1998. This study has been further enlarged by Zhukov, Stanislav (2002) “Central Asia: Development under Conditions of Globalisation”, in Boris Rumer (ed.) *Central Asia: A Gathering Storm?* (New York: M. E. Sharpe). This study which has been extended to 2000, discusses the decline in labour productivity and cereal production in Kazakhstan, besides the exports and imports of Kazakhstan and their percentage to GDP.


*Kazakhstan for Years of Independence: Informational and Analytical Compendium* (2006) of Agency of Statistics of the Republic of Kazakhstan deals with the main indicators of agricultural production and highlights the share of agriculture in gross domestic production in Kazakhstan. It also highlights the cultivation of different of crops and gross harvest, and points out sown area under main agricultural crops in the Republic. It gives number and output of livestock and poultry in Kazakhstan too. *Central

**Energy Sector**

*The Country Analysis Briefs: Kazakhstan* (February 2008) of Energy Information Administration (EIA) gives detail overview of energy reserves, various oil and natural gas fields, recent production from these fields and companies engaged in developing these fields. The report also mentions various oil and gas pipelines existing in Kazakhstan. The *BP Statistical Review of World Energy* (June 2009) provides information about proven reserves, production and consumption of oil, natural gas, coal and uranium in Kazakhstan. It also compares energy reserves of Kazakhstan with other energy rich countries of the region and the world. The report *'Central Asia's Energy Risks'* (May 2007) of International Crisis Group (ICG) gives information about oil and natural gas fields, reserves and production in Kazakhstan. It provides present export routes, amounts of oil and gas reserves and discusses possible alternative export routes from Kazakhstan.

Wandel, Jurgen and Kozbagarova, Botagoz (July 2009) in *Kazakhstan: Economic Transformation and Autocratic Power* of Mercatus Policy Series: Country Brief No. 4 (U.S.: George Mason University) provides information about oil and gas reserves and production from various fields in Kazakhstan. They also deal with the problems faced by Kazakh oil and gas to reach markets, role of the government in the natural resources sector and the National Fund of Kazakhstan.

The oil production and its crucial role in the development have been studied by Forsythe, R. (1996) in *Adelphi Paper* (300: 1-62). It gives the detailed information about important energy reserves and their production and transportation to various countries. Warikoo, K. in “Emerging Scenario” in K. Warikoo (ed.) *Central Asia: Emerging New Order* discusses the Central Asia’s situation soon after the independence in general and foreign investment into the Kazakhstan’s oil sector in particular. He highlights the major
joint venture deals between Kazakhstan and other countries. Oil and gas production in Kazakhstan has been described by Dorian, James P. (et al.) (1994) in "Central Asia's oil and gas pipeline Network: Current and Future Flows" in Post-Soviet Geography (35(7): 412-430). They examine the current pipelines for transporting and exporting oil and gas of Kazakhstan and through Kazakhstan. They further discuss possible future pipeline routes, politics behind these pipelines and various joint-ventures of existing and proposed oil and gas pipelines in Kazakhstan and Central Asia. Reznikova, Oksana (1996) in "Transitional Corporations in Central Asia" in Boris Rumer (ed.) Central Asia in Transition: Dilemmas of Political and Economic Development provides information about production of gas and oil in Kazakhstan and its share in the world market. His work deals with the largest investment projects with the foreign capital in oil, gas and gold production. He examines various pipeline routes and particularly economic efficiency of shipping of oil from Tengiz deposits in Kazakhstan. The economic potential of natural resources in general and hydrocarbons in particular have been analyzed by Chenoy, Anuradha M. (1997) in "Political and Economic Processes in the Central Asian Republics" in International Studies (34(3): 301-312). She has emphasized the major collaborations and commercial, political and strategic interests of oil in Kazakhstan and other Central Asian States. Clawson, Patrick (1998) in "The Disintegration of the Soviet Union: Economic Consequences for the Middle East" in David Menashri (ed.) Central Asia Meets the Middle East (London: Frank Cass Publishers) mentions energy balance of different sources like, oil, natural gas, coal, etc. of Kazakhstan from 1991 to 2000. He focuses on the transportation system and suggests possible future routes of transportation for better economic development. The long-term programme of Kazakhstan to expand crude oil production has been observed by Sagers, Matthew J. (1993) in "Long-term Plans for Oil and Gas Sector in Kazakhstan" in Post-Soviet Geography 34(1): 66-69). He focuses on the long-term programme to find new reserves in the western, central and southern portions of Kazakhstan. Sagers, Matthew J. (1993) in "The Energy Industries of the Former USSR: A Mid-year Survey", in Post-Soviet Geography (34(6): 341-418) describes the general trends of energy production. He further discusses oil, natural gas, coal, electric power from thermal, nuclear and hydro-electric projects separately with their production capacity and use of different purposes.

The literature survey mainly focuses on the path of economic reform and development in Kazakhstan. The materials reviewed primarily deal with economic transition and its impact on economic policies in general. The research study revolves around the industrial, agricultural and energy development, and role of energy and transportation on Kazakhstan’s socio-economic development.