Chapter-I

A GEOPOLITICAL PROFILE OF CONTINENTAL SOUTH ASIA

Defining the Region

Steeped in controversy, the concept of ‘region’ in geography, ironically, suffered from vagueness, relative neglect, and lack of an agreed definition. “So much geography is written on a regional basis that the idea of the region and the regional method is most familiar and quite accepted. Yet as with so many other familiar ideas which we use everyday and take for granted, the concept of region floats away when one tries to grasp it, and disappears when one looks directly at it and tries to focus”.  

Evidence the work of physical geographers, which is full of rigorous and precise analyses of areas integrating a variety of data. Historically, the aim of geography has been to describe the world we live in, and “the regional method has been the means to this end”.  

Generally, region is an idea, and a method to study the world, and divisions on regional basis are mostly personal, somewhat arbitrary, with the boundaries of the region quite ad hoc. And the idea of region is often so nebulous, so personal and peculiar, that its expression and concretization can take different shapes. Hence the variety in its definition: “A domain where many dissimilar beings, artificially brought together, have subsequently adapted themselves to a common existence” (P Vidal de la Blache); “An area whose physical conditions are homogeneous” (W L Joerg); “An area characterized throughout by similar surface features and which is contrasted with neighbouring areas” (N M Fenneman), and so on. 

The idea of a region and of dividing the world on a regional basis thus being entirely personal, somewhat arbitrary and subjective, and the boundaries of the region quite ad hoc. It clearly becomes the prerogative of a geographer, analyst or any scholar for that matter, to define the region on its own merit, and highlight one or the other of its dimensions. A distinguished geographer,
Richard Hartshorne, seems inclined to support this view: “any regional division is not a true picture of reality, but it is an arbitrary device of the student…depending on what elements appear to him as most significant”. 4

Geographically, a region would seem to be a part of the earth’s surface. Where human activity and physical conditions combine to form a pattern so distinctive that it marks off the area as different from any other part of the world. One does not, therefore, look for homogeneity in the sense of ‘sameness’ in the region, but instead tries to discern a unifying pattern, which in fact may owe its distinctive character to the contrasts that region reveals; in other words, one seeks unity in diversity. What matters is that, in addition to similar features, its differing characteristics should be amenable to assimilation.

Utility of the term ‘region’ in world politics lies in the fact that policymakers find within a given territorial area a number of interrelated problems that are distinct in form and concept. Thus, the relationships existing among a group of states in a given region would be more important than their relationships with states outside the region. Accordingly, the study of politics of a particular region has long been in use, and one finds in the contemporary terminology of international politics regions being commonly referred to as ‘Western Europe’ or the ‘Middle East’, or ‘Southeast Asia’, and so on. The implication is that the states of the region are in many respects interdependent, largely because of their geographic relatedness; that this relatedness is a source of varied affinities between those states; that consciousness of the area identity can motivate and move some or all those states to deal collectively; and that policies towards any state in the group should take account of the likely reaction of its neighbours.5

Regions have been sought to be identified and configurated through delineation of their boundaries on the basis of a vast amount of empirical data and using elaborate quantitative techniques. In doing so Bruce Russett identifies a region using the criteria of social and cultural homogeneity,
political attitudes on external issues expressed in voting in the United Nations, political interdependence reflected in participation in intergovernmental organizations, economic interdependence seen in the correlation between intra-regional trade and national income, and, of course, geographic proximity. But then one can arrive at widely divergent results because of the difference in the weights attached to these variables; problems of perception and judgment in the use of aggregate data are also there. So much so that regions so defined has as little substance as “the emperor’s new clothes”.  

Another method of defining a region is to identify a cluster of variables that form linked pattern within each international region. Here the configuration of the region is arrived at by mapping the basic attributes of the states in the area and their major pattern of relations. The stress here is on geography together with the insight of area specialists sensitive to factors such as consciousness of regional identity, felt cultural and other affinities, and perceived interdependencies.  

A distinguished political geographer, Saul B. Cohen, prefaces his geopolitical approach by drawing attention to what geographers consider a geographical region. Contrasted with a single-feature region (a climatic, or a physiographic, or a trading region), is the multi-featured, or composite ‘geographical region’, which is organization of space, based on both quantitative and qualitative criteria, and expressing associations of various elements. The geographer considers the region merely a device for separating aerial features: “a community of physical, biotic, and societal features that depict, or are functionally associated with man’s occupation of area”. The geographical setting ‘provides us with a basis for understanding today’s political map and for anticipating change’, holds Cohen; ‘Therefore the geopolitical map is more closely attuned to reality than is political map’.  

The Continental South Asia region embraces what is some times called the Indian sub-continent, consisting of the triangular mass of India and the great alluvial lowlands south of the Himalayas. Included in this are the
countries of India, Pakistan, Bangladesh, Nepal and Bhutan. Though part of a single geographical system, these countries contain a multitude of topography, climate, ethnic, religious and linguistic patterns, culminating in great complexity and many problems. Democracy in India and Bangladesh, civil/military rule in Pakistan along with constitutional monarchy in Nepal and theocratic monarchy in Bhutan, form the political climate of this region. Historically bound by common British influence and colonialism, the countries share the economic underdevelopment, poverty, over-population (except Bhutan, which is under populated) and multiple social diversities.

Sir Halford J. Mackinder while commenting on the ‘World Island’ has described the Euro-African-Asiatic landmass as the most important single geographical unit in the world. Continental South Asia forms an integral part, if not the core, of Asiatic landmass.

India

India is seventh largest in the world and most populous country after People’s Republic Of China. India is the home of 16 percent of world’s population and it accounts for 2.42 % of the total world area. Touching the Indian Ocean on the east in the Bay of Bengal and on the west in the Arabian Sea the country has a coastline of 7,516.6 Kms. It has a land frontier of 15,200 Kms. Not only it juts out deep into the Ocean virtually crowning the Ocean realm, India has its group of islands deep into the Indian Ocean. The island group of Andaman and Nicobar expands Indian horizon to Southeast Asia making Indonesia its close neighbour. Similarly the island group of Lakshdeep and Minicoy extend Indian boundaries to one of the busy sea routes of the world. The eastern borders of India are flanked by Bangladesh - the land criss-crossed by rivers and rivulets forming the lower part of Ganga and Brahmaputra river basins- and Myanmar. The Himalayas fences Indian boundaries in the north. The land-locked Nepal and Bhutan along with People’s Republic of China share their boundaries in the Himalayan ranges. In
the northwest the country is bordered by Pakistan with whom it shares history, culture, language etc.

India is one of the oldest civilizations with a kaleidoscopic variety and rich cultural heritage. It has achieved multifaceted socio-economic progress during the last 53 years of its independence. India has become self sufficient in agricultural production and is now regarded the tenth Largest industrialized country in the world and the sixth nation to have a successful outer space programme. It covers an area of 32,87,263 Sq. Km. extending from the snow-covered Himalayan heights to the tropical rain forests of South. As the seventh largest country of the world, India stands apart from the rest of Asia marked off as it is by mountains and the sea, which gives the country distinct geographical identity.

The culture of India is of great antiquity. The earliest Indian civilization prospered in the Indus valley from 4000 to 2500 B.C. Beginning about 1500 B.C. Aryan invaders entered India from the northwest and intermingled with the local Dravidian population. The foundations of Indian society, including Hinduism and the caste system, were established from these two groups. Buddhism and Jainism also began in ancient India. India’s culture received strong Islamic influences beginning in the medieval period and continuing under the Mughal Empire. The country gradually slipped into the various kinds of cultural influences, which naturally surfaced in India with coming of Europeans, mainly the British.

India got its independence from the British on August 15, 1947. The country was partitioned into two independent states –India and Pakistan (East and West) after unprecedented migration on communal lines from either side. India is a union of 28 states and 6 Union territories and one National Capital Territory.

India can be divided into three main topographic regions: the Himalayan mountain system, on the north; the Northern Plains, drained by the
Indus, Ganga and Brahmaputra rivers in north central India; and Peninsular India in the south. The Himalayas form parts of India’s borders with Pakistan, Afghanistan, and People Republic of China. With Nepal, Bhutan in the west, and Myanmar in the east. The region is topographically complex and divided into prominent Valleys and mountain ranges. The highest mountains are in the Karakoram Range, where more than 30 peaks rise above 7,300 m. South of the Karakoram are the Great Himalayas, which include Nanda Devi 25,645 ft, the highest peak in the country. Between the two major ranges (Karakoram Himalayas) is the narrow valley of Upper Indus River. The Vale of Kashmir located on the upper Jhelum River and focuses on the town of Srinagar. To the east, the mountains form most of the Indian states of Sikkim and Arunachal Pradesh.

The Northern plains are part of vast lowland extending across the continent from Pakistan in the west to Bangladesh in the east. The plains are bordered on the foothills of the Himalayas. To the east, the plains touch the Khasi Hills and Shillong Plateau south of the Brahmaputra basin. And south of the Indo-Gangetic Plain, rise the uplands of Peninsular India. In India, these alluvial have a length of about 1,600 km. It is drained in the west by the Beas and the Sutlej rivers -the tributaries of the Indus; in the east by the Brahmaputra; and in the rest of area by the Ganga and its many tributaries and distributaries. The Northern Plains are formed of alluvial deposits derived mainly from the Himalayas and deposited over the lowland by the major rivers.

Peninsular India is geologically the oldest part of the sub-continent. Ancient crystalline and metamorphic rocks underlie most of the region, but basaltic lavas (igneous rocks) cover parts of the Deccan Plateau. Topographically, the surface of the peninsula is tilted down towards the east and north, forming a belt of uplands along the western edge. These uplands, reaching more than 8,000 ft., include the Western Ghats and the Nilgiri Hills.
The northern edge of the peninsula, although lower, is also prominent and rises south of the Northern Plains to form the Aravalli range in the west and the jungle-covered Chota Nagpur Plateau in the east. Only a narrow coastal plain lies between the Western Ghats and the Arabian Sea; more extensive plains, including the deltas of the Cauvery, Krishna, Mahanadi, and Damodar rivers line the east coast.23

The four principal soil types in India are mountain soils, alluvial soils, and regur soils, and red soils. Mountain soils are found in upland areas too steep for regular soil development; they range in texture from sandy in the drier Aravallis to clays in the wetter Himalayas. Alluvial soils cover the broad flood plains of the Indo-Gangetic valley and the Brahmaputra basin, the smaller river valleys and deltas of the peninsula, and the coastal lowlands; these soils, ranging from sandy loams to clays, are generally fertile, but are sometimes saline when improperly irrigated. The regur soils are rich, fertile black soils found in the sections of the peninsula covered with basaltic lavas and also in some eastern and southern regions. Red soils, which cover most of the peninsula, are less fertile, like patches of nutrient-deficient laterite soils.24

The climate in the country is varied. Rajasthan Desert in northwestern India is semiarid, but the majority of India has a tropical Monsoon climate associated with a wind reversal between summer and winter. In summer low-pressure areas develop over the continent as the land heats up, and summer Monsoon winds are drawn on to the land from the Arabian Sea and Bay of Bengal. These moisture-laden winds release heavy rainfall when they reach the coast or are forced to rise over mountains; summer monsoon months between mid-June to mid-September are generally wet and hot, with temperatures between 27°C and 32°C.25 In the winter high pressures build over the land; winds then blow predominantly from the land to the sea. Winter in India—mid-December to mid-March— is predominantly dry and cool, with temperature averaging 21°C. Two transitional seasons occur before and after the summer rains. A hot and dry pre-monsoon season lasts from mid-March to mid-June with temperatures between 38°C and 43°C. A post-monsoon season
occurs as the monsoon retreat -mid-September to mid-December- and is associated with light and sporadic rainfall and temperature averaging around 25°C. Cooler, more temperate conditions prevail in the Himalayas, which decrease with altitude.

Precipitation ranges from almost zero in the Thar Desert to 10,870 mm annually in the Shillong plateau, which is one of the wettest places in the world. Rainfall is generally heavier in coastal and highland area and gradually decreases inland. Monsoon varies widely from year to year, and place to place especially in inland areas. Crop damage may also occur on a smaller scale in parts of eastern India where “Nor-Westers” and Bay of Bengal cyclones strike the land, most often in May and early June, in the form of tornadoes, whirlwinds, hailstorms, and heavy downpours.

River Ganga or Ganga rises in the Himalayas and flows across the Northern plains in a broad, meandering course to join the sea in the Bay of Bengal. The Ganga reaches the sea through multiples distributaries in Bangladesh; its principle tributary in India is Hooghly River, which flows through Calcutta (Kolkata). Brahmaputra River also rises in Himalayas and join the Ganga in Bangladesh and flows down together into the Bay of Bengal.28

In northern India the major drainage basin is that of the Indus River; although most of this basin lays in Pakistan, the headwaters of the Indus and two of its major tributaries, the Sutlej and the Beas, are partly in the India and are extensively used for irrigation. The principle rivers of Peninsular India are the Chambal, Son, Mahanadi, Godavary, Krishna, Cauveri, Narmada, and Tapi. Principle lakes include the Chilka, Kolleru, Pulicate, Lonar, Pushkar, and Wular.29 A coastal swamp, the Sunderbans, fringes the Ganga delta. The Rann of Kuch is a saline swamp in northwestern India and southern Pakistan, off the Arabian Sea coast.

The annual regime of river flow in India is controlled by climate conditions. Rivers flowing from the Himalayas experience two high-water
seasons, one in early summer caused by snow melt in the mountains, and in late summer caused by run-off from monsoon rains. Other rivers experience high waters only during the monsoon, followed by periods of diminished flow, when many of the smaller rivers run dry. To counteract this marked periodicity of river - flow, groundwater wells and tube - wells are widely used for irrigation in the northern plains and peninsular delta regions; and many dams have been built on the major rivers to regulate river flow and distribute water for an intricate system of irrigation canals.

Seven vegetation regions are found in India, although the natural cover has been modified by several millennia of human occupation. In the western Himalayas vegetation changes with altitude from temperate deciduous forests at low elevations through coniferous forests to Alpine vegetation above the tree - line. The eastern Himalayas have more extensive deciduous forest cover. In northeast, east of Bangladesh, vegetation cover ranges from tropical evergreen in the wet lowlands to temperate deciduous forest in drier and cooler areas. The semiarid Punjab-Rajasthan-Gujarat region mainly supports scrub vegetation cover. In the heavily cultivated Ganga plain, islands of deciduous trees and tuft grasses remain among the agricultural fields. The peninsular uplands support tropical monsoon deciduous and scrub forests, while the wetter slopes of the Western Ghats support a tropical monsoon deciduous forest, with an evergreen cover in some areas.30

The resources are rich and varied. Coal and iron ore are found in abundance and located close to each other in the Chota Nagpur Plateau in the eastern peninsula. Manganese, lignite, copper, bauxite, kyanite, fire clays, mica, and limestone are found in large quantities. Petroleum occurs offshore in Bombay High, Assam and Gujarat.

India also has vast land resources. Of the total land area, 19.5% is officially claimed under the forest, 41.6% is sown, 7.6% is left as fallow, 3.9% is in permanent pastures, and 1.5% supports permanent crops such as tea and fruit trees. Irrigation is of great importance to Indian farmers. India has a
potential to irrigate 1.07 million square km, but only 42% of this land is currently irrigated. Canals from the major rivers provide water to 40.9% of the irrigated areas; wells provide water for 40.7% and tanks provide water to 11.4%.31

India has one of the world’s most diverse populations. Historically, one race after another settled in India, and each successive wave usually drove the earlier settlers into forested highlands and extended their own area. In this process a good deal of racial intermingling occurred. The Negritos include Andamanese, the earliest occupants, now form small enclave in Bihar and Kerala. The Mediterranean type has contributed most to the physical features. The Alpine element is more seen, although in a mixed form, in Gujarat, Maharashtra and Tamil Nadu. The Proto-Nordic Aryans32 moved first into the Indo-Gangetic lowland, and subsequently, mixed with other groups, into the peninsula. Today, however, except for isolated tribal groups, it is difficult to identify any regional group based on purely ethnic or racial criteria.33

About 200 different languages and about 2000 dialects are spoken in India. Hindi is the official language and English is widely used in government, business, intelligentsia and urban elite. In addition, 14 other languages34 have received official recognition in the constitution. Multiplicity of languages has become a major classifying factor for Indian people.

India is the birthplace of Hinduism, Buddhism, Jainism and Sikhism. Hindus constitutes about 83% of the population Muslims 11%, Christians 3%, Sikhs 2%, and Buddhists (mostly adherents of Tibetan Buddhism) and Jains each less than 1%. The caste system35, a set of social and occupational classes into which the individuals are born, is an important facet of Hinduism and thus is a dominant feature of Indian social life.36

Second largest in the world in terms of population, the India’s population has increased from 23.8 crore in 1901 to 54.8 crore in 1971 and stood at 68.3 crore in 1981 and 100 crore in 2000. The rapid population explosion has resulted from constantly high birth rate and falling death rate.37
The state governments provide health-care facilities, and the Central government sponsors the programmes dealing with epidemic diseases and diseases resulting from nutritional deficiencies. Family planning, with emphasis on birth control, was officially encouraged for many years as the government attempted to lower the birthrate.

Education is the shared responsibility of Central and state governments, with the Central government laying down policy directions and the states implementing them. The system of education comprises primary, secondary, and higher education. It also has professional, vocational, technical, medical, agricultural and other streams. India has made notable progress in the field of education. Starting from a few educational institutions at the time of country’s independence, it can now boast of one of the best educational institutes in the world. Though the literacy rate is low (below 50%) still Indian education has produced the best minds, which are second to none at world stage.

Several National health programmes are being implemented as Central government sponsored schemes aimed mainly at reduction of mortality and morbidity caused by major diseases. Major health schemes include the National programmes for eradication of malaria, blindness, leprosy, tuberculosis, AIDS including blood safety measures and STD control, cancer control. Special attention is also being paid to Trauma and Spinal Injuries. Pilot projects have also been taken up in respect of cardio-vascular diseases, diabetes and rehabilitation of the medically disabled. During 1998-99, an outlay of Rs. 1,145.20 crore including Rs. 524 crore as foreign aid was approved for Central sector health programme.

India initiated planned economy with First Five Year Plan commencing 1951. Since then the country has had nine Five Year Plans. Though the rate of target achievement fixed by the plans has been a mix of success and failure, but it has given India a sustained, multifaceted overall development. Under the successive plans, a diversified, modern, industrial
economy, with a large measure of state control, was sought to be developed and has been partly achieved. Gradually, the colonial economy was replaced by planned economy. Economic development thus gained has made India as one of the world’s most industrialized nations in terms of output. However, economic gains have been largely nullified by various factors such as growing population, parallel economy, corruption — political and bureaucratic— inherent social problems and of course the unforeseen natural calamities.

Since the 1950s, India’s development Plans have stressed on increased input in steel, engineering, and chemical industries, with concomitant support from mining; these, together with the large textile industry developed under the British, have been the backbone of Indian industry. India has had a clear industrial policy, which has been periodically revised to meet the new challenges and demands. In 1999-2000, India produced approximately 12.2 million metric tonnes of steel, about three times the steel output of 1960. Principal steel and engineering centers are Asansol, Jamshedpur, Bilai, Durgapur and Rourkela, in the Chota Nagpur plateau, and Bhadravati, in the southern peninsula. Chemicals and petrochemicals are produced in the greater Calcutta (now Kolkata) and Bombay (now Mumbai) areas; and India is one of Asia’s largest producers, in terms of output, of chemicals and chemical fertilizers. The textiles industry is more dispersed, with factories and handlooms throughout India; India ranks among the leaders in the world in output of cotton yarns and fabric.

Scientific and technological activities in India are carried out under a wide set-up consisting of Central government, State government, higher educational sector, public and private sector industry and non-profit institutions/associations. These institutional structures, with their research laboratories, are main contributors to research and development being carried out in the country. Notable among these are: the Council of Agricultural Research (C.S.I.R), Indian Council of Agricultural Research (I.C.A.R), and Indian Council of Medical Research (I.C.M.R). In addition, there are many departmental laboratories of various departments/ministries, viz., Department
Further, there are over 1,200 in-house research development units in industrial undertakings supporting research in their respective industries. Many Universities and Deemed universities such as I.I.Ts also undertake substantial research and development work.44

The country is rich in minerals. The mineral reserves like iron ore, manganese, mica, chromites, magnetised thorium and titanium are quite ample and also the reserves of bauxite, non-cooking oil, limestone, gypsum, dolomite, silica, refractory, salt are also satisfactory. But India is quite deficient in respect of some vital minerals like copper, lead, gold, zinc, silver, phosphate, nickel, cobalt and mineral oil and very much deficient in platinum, tin, potash, sulphur, borax and mercury.45

The installed power generation capacity in the country has increased from a meager 1,400 MW in 1947 to 92,864.06 MW at the end of 1998-99 comprising 22,438.48 MW hydro and 67,617.46 MW thermal (including gas and diesel), 968.12 MW Wind and 1,840 MW nuclear. The target of power generation during 1998-99 was fixed at 450 billion units (BUs) out of which thermal stations programmed 362 billion units for generation, 78 BUs by hydro stations and 10 BUs by nuclear stations. Against this target the actual power generation during 1998-99 was 448.38 BUs comprising 353.66 BUs thermal, 82.71 BUs hydro and 12.01 nuclear.46

India is essentially an agricultural country. Landlordism was officially abolished in the 1950s, and small, owner-operated farms are the mainstay of Indian farming. About 64% of the labour force are employed in agriculture, and farming accounts for about 33% of the national income.47 About 55% of the total land area is arable, and many areas support two crops a year. The principal Kharif (summer monsoon) crops are rice, which is grown on 24% of
the cultivated land, and millet, grown on 21%. The leading Rabi (winter) crops are wheat, grown on 11% of the cultivated land, and pulses, which occupy 14%. India ranks fourth in world wheat production and second in rice, millet, and pulse production. The principal cash crops are cotton, grown widely as Kharif crops on 5% of the cultivated land, jute, grown mainly in hot and humid areas, especially the Ganga Delta and the eastern coastal plain. Tea is raised on plantations in the hills of Assam, West Bengal, Tamil Nadu, Kerala, and Karnataka. Oil seeds, sugarcane, tobacco, spices, fruits and rubber are also grown. India ranks first among the world’s nations in production of tea and sugarcane; second in output of jute; and third in cotton production. Country is endowed with the largest livestock population in the world. It accounts for 57% of the world’s buffalo population. According to Livestock Census (1992) India has about 20.5 crore cattle and 8.4 crore buffaloes respectively as compared to 15.5 crore and 4.3 crore in 1951. India is the leading Asian producer of milk, butter, and animal hides, although many cows are of poor quality and are a strain on the rural economy in times of famine.48

Conscious about the significance of agriculture, successive Five Year Plans have sought to improve the agriculture sector, to make it a formidable aspect of Indian economy. The successive governments decided to set up a wide network of agricultural institutions – in the field of research and development, irrigation, seed, engineering, remote sensing etc.- to develop and modernize agriculture. The country launched the Green Revolution in late 1960s, which made it self sufficient in food grains. The Green Revolution, however, could not spread throughout the length and breadth of the country because of various reasons. Over the years the agriculture has diversified itself to meet the needs of the market and the consumer.49

In recognition of the important role of inland fisheries in overall production of fish the Government has been implementing an important programme in inland sector, viz., Development of Freshwater Agriculture through the Fish Farmers Development Agencies (F.F.D.As). A network of 422 F.F.D.As is functioning now covering all potential districts in the country.
Water area brought under intensive fish culture through the efforts of these F.F.D. As is 4.56 lakh hectares up to 1997-98. The agencies have trained 5.77 lakh fish farmers in improved practices. Apart from major fishing harbours, viz., Cochin, Visakhapatnam, Roychowk and Paradip, 30 minor fishing harbours and 130 fish landing centers have been constructed to provide landing and berthing facilities to fishing crafts. In 1997-98, the fish production was 53.88 lakh tones (Marine 29.50 and inland 24.38).  

The rail, road and air transport has expanded over the years as a viable network. Indian Railways has grown into vast network of 7,068 stations spread over a route length of 62,495 km with a fleet of 7206 locomotives, 34,728 passengers service vehicles, 5,302 other coaching vehicles and 2,63,981 wagons as on 31 March 1998. In 1979-80 the volume of railroad passengers and freight traffic was about double that of 1950-51, the total length of roads 33,19,644 km (both surfaced & un-surfaced roads) in March was three times greater than in1950-51. Domestic air-service, touching major Indian cities, is carried out by the Government owned Indian Airlines alongwith various smaller private air operators. The overseas operations, are carried by the official Air India.

In 1997 India recorded a trade deficit of US $ 10,349 m., and there was a deficit of $3,532 m. on the current account of the balance of payments. In 1997-98 the principal source of imports (8.9%) and the principal market for exports (19.5%) was the USA. Other major trading partners were Japan, the United Kingdom and Germany. The principal exports in 1997-98 were gems and jewellery, chemical and related products, engineering products and ready-made garments. The principal imports were mineral fuels and lubricants, non-electric machinery, pearls, precious and semi-precious stones, and chemicals.

India is a Union of States with certain Federal characteristics. Legislative power is vested in Parliament, consisting of the President and two houses. The Council of States (Rajya Sabha), having 245 members, most of whom are indirectly elected by the state assemblies for six years and the
remainder nominated by the President. The house of the people (Lok Sabha) has 543 members directly elected by the people for five years. In addition two members of the Lok Sabha are nominated by the President to give representation to Anglo-Indian community. The President is constitutional Head of the State, elected for five years by an Electoral College comprising elected members of the both Houses of Parliament and the state legislatures. The President exercises executive power on the advice of the Council of Ministers, which in turn is responsible to the Parliament. President appoints the leader of the majority party/ or combination of parties as the Prime Minister. On the recommendation of Prime Minister, the President appoints other ministers.

India contains 28 self-governing states, each having a Governor appointed by the President for five years as its constitutional head. A legislature elected for five years by the people of the state and a Council of Ministers headed by Chief Minister. Normally every state has a unicameral legislature with the exception of Bihar, Jammu and Kashmir, Karnataka, Maharashtra and Uttar Pradesh. Each state has its own legislative and executive, corresponding and subject to that of the Indian Union. India has established a single judicial system with the Supreme Court (in New Delhi) is the apex court and responsible to protect/interpret the constitution and having final say in the matters of adjudication. The country has independent judiciary, which carries out the matters of justice without fear or favour. A wide network of political parties who has localized caste/religion/region/culture/language based moorings. In the event of the failure of constitutional government in a state, presidential rule can be imposed by the Union. There are also six Union Territories and one National Capital Territory, administered by the Central Government through Lieutenant Governors or Administrators, appointed by the President. India is recognized the world over largest working democracy with basic rights enshrined in the constitution. India has developed a stable political system.
Thus, India is a country of continental dimensions. In Continental South Asian region, the country is not only biggest geographically, but also has the largest economy, biggest institutional network, highly developed industrial sector, ever expanding agriculture and has one of the largest technical manpower in the world. It is a land of contrasts, highly developed yet has poorest of the poor population. Has had planned development yet unable to meet even basic needs –drinking water, electricity, housing etc.- of its vast population. Has a stable and mature political leadership punctured by chaotic political situation at times.

India has notable water potential, being a land of rivers. The details of its river-water resources, finds mention in the next chapter.

Pakistan

The Islamic Republic of Pakistan constitutes the north –western part of Continental South Asia. Bordered by India to the east and Afghanistan and Iran to the west. It has a shorter frontier with the People’s Republic of China in the north - east. A land of ancient Indian Civilisation of Mohanjodaro and Harappa, the area now constituting Pakistan has been a part of India till it attained a separate (independent and sovereign) status as a result of partition of India in 1947. Pakistan, thus created on 14 August 1947 itself had two separate geographical wings (East and West Pakistan) 1600 Km. apart from each other. The two wings could not pull together for long due to a host of reasons. The Eastern Wing of then Pakistan became a separate country of Bangladesh as a result of Indo – Pak conflict in 1971.

One-third of Pakistan consists of plains along the Indus Valley in its south and east. The remainder, in the west and north - west, is a continuation of the eastern Himalayas. The plains are well irrigated and densely settled. Pakistan’s portion of the Thar Desert on the east constitutes part of its Sind province and the arid tableau of the Baluchistan plateau lies in the southwest. To the north the land rises to elevations between 300 and 600m in the Himalayan foothills and rises to more than 6,000m in the rugged mountains of
the Hindu Kush and Kashmir’s Karakoram Range. Here the Godwin Austin (K2), the world’s second highest peak, rises to 8,611 meters.60

Soils are high in calcium and low in humus, reflecting the semiarid climate. They are alluvial in the Indus Valley and range elsewhere from loess in Baluchistan to sandy desert loams Sindh. The Indus and its six Pakistan tributaries - the Sutlej, Beas, Chenab, Jhelum, Kabul, and Ravi - are the major rivers and provide irrigation water for Punjab and Sind provinces through a system of dams and canals.61

Pakistan’s climate varies from hot and dry, with cooler temperature and greater rainfall in mountain areas. Annual temperatures average about 24°C on the plains and 7°C in the mountains. Most rain falls during the summer monsoon (July-September). The natural vegetation is predominantly drought resistant, i.e. tough grasses and scrub trees in semiarid areas. Desert vegetation is found in the Thar Desert and Baluchistan Plateau. Where water is available, a wide variety of plant flourishes. Forests cover is abysmally low occupying about 3% of the land. Which is further depleting by over-cutting in accessible areas. Deciduous forests are found in the rainy Himalayan foothills, and conifers at higher elevations. Wild animals and birds abound in the mountains.62

Pakistan’s diverse population reflects many centuries of invasions and settlements by the Dravidians, Aryans, Greeks, Persians, Arabs, Afghans, Turks, and Mongols.63 The Punjabis, the largest ethnic group, constitute about 60% of the total population. The largest ethnic minorities are the Sindhis (12%), who form a majority of the population Sindh, and the Pathans (Pushhtuns, 13%), who predominate in the North-West Frontier Province (N.W.F.P.) and have strong ties with Afghanistan across the border. The Baluch (2%) and the obscure Brahuis, a small minority of mixed Dravidian ancestry, are found mostly in Baluchistan. The influx of at least 3.8 million (1990) refugees over the last few decades have settled down in different parts of the country.64
English is widely used in business and government, and Urdu is the national language. Punjabi is spoken by 48.2% of the population (Pushto 3.1%, Sindhi 11.8%, Saraiki 9.8% and Urdu 7.6%). Islam, the official religion is professed by 97% of the population. Rest is constituted by Christians, Hindus, and Sikhs.65

The population has increased from about 33,780,000 in 1951 to 130,579,571 in March 1998. It continues to grow at about 3.2% a year. The birth rate 39.4 per 1000 inhabitants (1990-95) remains one of the highest in the world despite efforts to reduce it by official family-planning programmes. The death rate is 9.2 per 1000 (1990-1995). The life expectancy is 61.5 years (males 60.6; females 62.6). About 29% of the population is urban. The largest cities are Karachi and Lahore (the former with over 9,269,000 and later with 5,063,000 inhabitants in mid-1998 census). Other important urban centers are Islamabad and Rawalpindi, Lyallpur (Faisalabad), Hyderabad, Multan, Gujrawala, Peshawar. Pakistan’s population density is 169.6 per sq. Km. at mid-1999.66

Universal free primary education is a constitutional right, but education is not compulsory. Primary education begins at five years of age and lasts for five years. Secondary education, beginning at the age of 10, is divided into two stages, of three and four years respectively. From 1976 subjects related to agricultural technology were introduced into the school curriculum, and 25 trade schools were established in 1976. There are 25 Universities. Development expenditure on science and technology and education and training in 1997/98 was projected Rs.238 millions (only 0.3% of the Government’s total development spending). In 1995, according to estimates by UNESCO, the average rate of adult illiteracy was 62.2% (males 50.0%; females 75.6%).67

Pakistan received a meager inheritance in science and technology institutions at the time of independence in 1947 as almost all the research establishments, universities and industries were located in areas now
constituting India. The present size of scientific activity in Pakistan is small and subcritical both in terms of manpower and financial outlays. The key scientific and technological institutions are: National Science Council, Pakistan Science Foundation, Pakistan Atomic Energy Commission, Pakistan Council of Scientific and Industrial Research, Pakistan Institute of Development Economics, Appropriate Technology Development Organization, Pakistan Academy of Sciences. There are other R&D institutions/centers, which are filling up glaring gaps. These are Veterinary and Animal Husbandry, Oceanography, Water Management, Solar Energy, Space Technology and Health Sciences.68

Carved out of India, Pakistan inherited a truncated road and rail system, irrigation-networks and manufacturing industries. The country found itself at the lowest ebb of development at its inception. Recovery began in 1955 with the first of the Five-year economic plans. Pakistan's economic performance over the last five decades has been, at times, quite spectacular, and at others, nothing but dismal. It failed to maintain the high growth rate in agriculture and manufacturing, which it experienced in the 1960s, after a difficult start in the first decade following independence. The 1970s, for a host of reasons, mostly beyond the control of the incumbent government, were not a patch on the 1960s, although surprisingly in 1970s the economy performed better than it did in the 1950s. Towards the end of 1970, and for much of the 1980s, until at least 1988, the high-growth pattern reemerged, though being qualitatively different from the growth performance of the 1960s. There were murmurs that perhaps Pakistan had once again returned to the "natural" growth rate of 6 per cent plus, and would now continue where it had left off in 1968-69. However, just as the ten-year period after 1958 unravelled resulting in an appreciable slowing down of the economy, so too did the end of the ten or so years from about 1978-79 onwards. After 1988, when a package of policy reform was introduced, the economy has performed less well than it did in the past. To a great extent, the structural adjustment programme, launched in Pakistan in 1988 under the guidance and direction of the IMF and World
Bank, has resulted in a visible slowing down in the economy, including income inequality, poverty, and unemployment, and hastening the process of deindustrialisation. The post-1988 period may turn out to be the worst period in terms of economic growth and development over the last fifty years.\(^69\)

Agricultural employs about 56% of the total labour force and contributes about 35% of the national income.\(^70\) Approximately 25% of the land is cultivated, about 80% of it with the aid of irrigation. In the 1960s, Pakistan significantly raised yields of wheat (the major food grain), rice, cotton, and sugarcane as a result of green revolution, making wider use of fertilizers, hybrid seeds, and careful water control (the canal irrigation system has, over the past century, caused the water table in the Indus basin to rise by an average 50 feet). Pakistan continues, however, to import large quantities of wheat to feed the growing population.\(^71\) According to FAO there were 19,000,000 cattle, 20,000,000 buffaloes, 29,065,000 sheep, 47,767,000 goat, 350,000 horses, 3,901 asses, 76,000 mules and 1,119,000 camels in 1995.\(^72\)

Manufacturing has expanded since 1947. Industry employs about 17.5% of the labour force (1994-95). Cotton textiles are predominant employing 29.8% of the total industrial labour force. The processing of local produces, viz., cotton ginning, sugar refining, tanning, and the production of ghee (clarified butter used in cooking) and other refined oils production is also undertaken. Heavy industry includes production of fertilizers, tools, chemicals, pharmaceuticals, and machinery. A private sector steel mill at Port Qasim near Karachi began trial production in 1979. In 1977, Pakistan produced 13.5 billion KWH of electricity, more than four times than in 1953. Hydroelectric power is important. About 65% of the electricity is produced by modern irrigation projects such as the multipurpose dams at Mangla and Tarbela. Coal, Petroleum, and Natural gas are used to provide about 35% of the energy production. A nuclear power plant is in operation at Karachi. Natural gas is piped from gas fields in Sindh to most major cities for domestic and use in industry.\(^73\) In 1997-98 petroleum provided 46.3% and natural gas provided 36.7% of the total energy supply. At present around 35% of Pakistan’s
petroleum is produced domestically. Imports of petroleum and petroleum products comprised 15.5% of the cost of total imports in 1997-98. In 1994 Pakistan launched a wide-ranging plan to restructure and privatise its power sector.74

An extensive rail network, created by the British, is now government owned and operated. Road provide access to most areas, especially the military roads built by the British to guard their frontier, but more than half are unimproved dirt tracks, and only 19,419 Km. have been upgraded suitably for modern tracks. Pakistan International Airline (PIA) serves domestic and international routes. The largest airport is at Karachi. The port at Karachi accommodates ocean-going vessels and shares the country’s overseas trade with a second port, Muhammad Bin Qasim, 42 Km. further east.75

Like other the countries of Continental South Asia, Pakistan has unfavourable balance of trade and regularly imports approximately twice as much value as it exports. In 1997 Pakistan recorded a trade deficit of US $2,391 m, there was deficit of $1,753 m, on the current account of the balance of payments. USA remains the principal source of imports (11.2%) in 1997-98. Which was also the principal market for exports (20.6%). Japan, Germany, the United Arab Emirates and the United Kingdom are other major trading partners. In 1997-98 the principal exports were textile yarn and fabrics, clothing and accessories, and food and live animals. And during this period the principal imports were machinery and transport equipment, mineral fuels and lubricants, and chemical and related products.76

The President is the constitutional Head of State, who is elected for five years by an electoral college, comprising the federal legislature and the four provincial assemblies. The former consists of a lower and upper house. The lower house, called the National Assembly, has 207 members elected directly for a term of five years, on the basis of adult suffrage, in addition 10 members representing minorities. The upper house, called Senate, has 87 members who are elected directly by the provincial assemblies and who serve
for six years, with one third retiring every two years. The President appoints the Prime Minister, who holds supreme executive authority, and he enjoys the majority Party in the National Assembly. The Council of Ministers is responsible to the National Assembly.\textsuperscript{77}

Pakistan is a federation comprising four provinces –Punjab, Sindh, Baluchistan and North West Frontier Province (NWFP)- each has an appointed Governor and provincial government, apart from the federal capital of Islamabad and federally administered ‘tribal areas’.\textsuperscript{78}

In Pakistan, military occupies a dominant position and has been in the effective command of state power ever since the inception of the State. Military installs the politicians and political parties in office to provide a facade of parliamentary government.\textsuperscript{79} Military expels the parliamentary government when the prospects of general election pose a challenge to its supremacy. The intervention of the military became more effective and intense when the new state of Pakistan started facing problems of vast magnitude, which included inexperienced and inadequate administrative staff, massive refugee problem, poor economic resources, regional conflict. Decline of Muslim League and the advent of coalitional politics paved way for unstable governments and ultimately leading to the collapse of the parliamentary system. Failure of the political leadership in providing effective civilian governments, political elites insensitive to the masses and their problems has also led to the collapse of Pakistani polity.\textsuperscript{80} At times military leadership has also stepped into power due to personal political ambitions of the Generals.

The political system in Pakistan has never been able to crystallize into a viable structural – functional network. The volatile upheavals experienced by the Pakistan’s political system leaves us to state that no permanent institution of governance was allowed to gain credence by the forces –internal as well as external- including the judiciary. Hence it becomes difficult for the outside world to deal with now military and now civilian governments on the vital issues.
Bangladesh

Bangladesh, formerly known as East Pakistan, located on the Bay of Bengal, bounded on most of its borders by India (approximately 4,000 Km.) and to the southeast by Myanmar (233 Km.). It occupies a total area of 147,570 sq. Km. The population is 124,774,000 (mid - 1998 estimate), and Bangladesh is one of the world’s most densely populated (845.5 per sq. Km. in mid -1998). Most of territory now in Bangladesh was part of the province of British India known as East Bengal, which in 1947 was joined with the Sylhet district of Assam to make East Pakistan -the eastern wing of the new state of Pakistan. The East Pakistan, however, remained part of Pakistan for about 24 years only. As time passed, a variety of differences cropped up between the two wings culminating into the creation of Bangladesh in 1971. The name Bangladesh means ‘the Bengal nation’. Bangladesh is predominantly a country of Bengalis, where people adhere to different religions, and some of them come from different races. By and large people identify themselves with the Bengali history, culture, language and traditions, which are similar to the Indian province of West Bengal across the border.

The Chittagong Hills in eastern and southeastern Bangladesh include the highest and most rugged parts of the country, with elevations rising to more 4,000 feet above the sea level. The remainder of Bangladesh is generally low-lying with elevations approaching only 900 feet in the hills of northwest and northeast and considerably lowers vast delta plains on Brahmaputra, Ganga, and Meghna rivers in southern Bangladesh. The lowlands of the delta region are criss-crossed by numerous distributaries of the main rivers and are frequently under water.

About 6%of the total area of Bangladesh is permanently under water, and two-thirds of it faces floods for part of the year. The floods often result in great loss of life, crops, and property. Nonetheless, they bring sediments to spread on the land, which is a blessing in disguise for agriculture. These alluvial soils are rich in minerals and other nutrients needed for plant growth. The fertility of the soil has attracted thousands of landless labours to shifting
silt islands (chars) off the coast, despite their vulnerability to natural disasters.86

Bangladesh has a tropical monsoon-type climate, with hot and rainy summer and a pronounced dry season in the cooler months. January is coolest month of the year, with the temperature averaging 26°C, and April the warmest month, with temperatures ranging between 33°C and 36°C. The climate is one of the wettest in the world, most places receive more than 1,525 mm of rain a year, and areas near the hills receive 5,080 mm. Most rain falls during the Monsoon (June-September) season.87

The forest cover of Bangladesh is 15%. The three principal forest regions are the Madhupur jungle, the tidal forest in the coastal Sundarbans (a swamp region in the Ganga delta), and the tropical rainforest of the Chittagong Hills.88

The principal resources of Bangladesh are the fertile soils of the delta region, the long growing season, and the heavy rainfall suitably distributed over the year for growing rice and jute. The country’s abundant water supplies (which find detail in the next chapter) are used to produce hydroelectric power and for irrigation.89

Although minerals have traditionally been economically unimportant, Bangladesh has large reserves of natural gas and some petroleum deposits. There are also large deposits of low-grade coal, mined at Jamalpur.90

More than 95% of the people of Bangladesh are Bengalis. The remainder is either tribal—who has distinctly Mongoloid features and lives mainly in the hills. In addition, there are 28 tribal groups, some of whom have been very receptive to the Christian Gospel. About 80% of the population is Muslim. Except for tribal peoples, most of the remaining people are Hindu. Bengali, the national language, is spoken by all but the tribal hill people, who speak a variety of languages.91
Bangladesh has one of the highest birth rates and population densities in the world. According to UN estimates, the average annual rates per 1,000 were: births 36.9% in 1985-90, 26.7% in 1990-95; death rates 13.6% in 1985-90, 11.0 in 1990-95.92

Bangladesh underwent nearly two centuries colonial exploitation: as a result when country became independent in 1971, it was one of the least developed countries of the world with very little access to the benefits of science and technology for its development. The country has given high priority to application of science and technology for achieving the development objectives. It has set up the S&T policy, planning and executive organs for this purpose. The policy and planning organ is composed of the National Council for Science and Technology (N.C.S.T) and the Science and Technology Division. The main institutions are: Agricultural Research Council, Medical Research Council, Bangladesh Council for Scientific and Industrial Research, Bangladesh Atomic Energy Commission and Atomic Energy Centre.93

Bangladesh is predominantly an agricultural economy. Double and triple crops are obtained where water is available for irrigation during the dry season. Farms are generally small, and many so small that normal agricultural crisis, such as floods, cyclones, and price fluctuations etc. have forced many land owners to sell their land and seek other avenues of earning. It has also caused the flight/migration of country’s population to neighbouring countries (especially India) in the hope of greener pastures. Rice, planted on 90% of the cultivated land, is the leading crop; however even in good years the output is insufficient for the needs of rapidly growing population. Planting of wheat as food crop has recently increased. The principal cash crops are jute, which is grown in flooded fields on the delta, and tea - produced mainly in the Sylhet and the Chittagong Hills. In 1996, according to the World Bank estimates, Bangladesh’s gross national product, measured at average 1994-96 prices, was US $ 31,217m., equivalent to $ 260 per capita.94
Jute is the principal industry, with the main centres of production at Dacca, Narayanganj, Chittagong, and Khulna. Bangladesh supplies more than half of the world’s jute, but the paper and plastic packing revolution has reduced world demand for jute products, and Bangladesh economy has suffered accordingly. Other manufacturers include textiles, cigarettes, steel, cement, fertilizers, and chemicals. It contributes 7.5% of total estimated GDP in 1997-98. Many of the industries nationalized by the government in 1972 have since been returned to private ownership. Energy is mainly derived from natural gas and petroleum. About 90% of the power generation is based on natural gas. The 130 MW Kaptai project on the Karnaphuli in the Chittagong Hills is the only major project in the country. Its total potential is estimated at 1500-2000 MW. In 1997 Bangladesh’s 17 gas fields were estimated to hold reserves of about 350,000 m. cu. metres and annual average of about 2,300 m. cu metres (with the fields operating at full capacity) of natural gas was being produced. In late 1997 it was announced by the Government that two British companies would start natural gas production in Bangladesh’s first off shore gas fields in 1998. The United States has also recently shown its keenness to commercially exploit the Bangladesh’s natural gas resources.

The extensive system of rivers has made the construction of railroads and highways very difficult. The rivers provide the largest single transportation network in the country and chiefly small boats are used. Inland waterways extend from about 4,830 – 6,520 Km. in the Monsoon. Silting is tending to reduce the milage.

Bangladesh has an unfavourable balance of trade and depends heavily on international aid and large developmental loans from overseas. The exports comprise readymade garments, jute and jute products, tea, leather goods, and fish. Imports include food, chemicals, manufactured goods, and machinery. Import of petroleum products and crude petroleum comprised an estimated 7.1% of the cost of total imports. In 1997, according to IMF, Bangladesh recorded a trade deficit of US $ 1,710.8 m, and there was a deficit of $ 286.3m on the current account of the balance of payments. In 1996-97 the principal
source of imports was India, while Western Europe was the principal market for exports. Other major trading partners were the USA, Japan, the People’s Republic of China and Hong Kong. Significantly, principal exports from Bangladesh in 1996-97 were ready-made garments (accounting for an estimated 49.1% of export revenue), knitwear and hosiery products, raw jute and jute goods, and frozen shrimp and frogs’ legs.99

Bangladesh’s constitution of 1972 provided for a Parliamentary form of government with a Prime Minister, who is the leader of the majority party in the legislature. The constitution was revised in 1975 with a strong presidential government. It also provided a unicameral parliament of 300 elected members. In 1975, however, the first President, Shiekh Mujibar Rahman, was assassinated.100 After that the country plunged into a long period of uncertain/unstable political turmoil where the armed forces directly or indirectly captured political power. The constitutional arrangements were subjected to the whims and fancies of the rulers who changed in quick succession.101

At present, constitutionally, the role of the President, who is elected by the Jatiya Sangsad (Parliament) for a five-year term is essentially that of a titular Head of the State. The Prime Minister, who is a head of Council of Ministers exercises executive powers. The President appoints the Prime Minister and on latter’s recommendation, the other ministers. The 300-member Jatiya Sangsad is elected by universal suffrage. The Jatiya Sangsad serve five-year term. For the local government, the country is divided into 64 administrative districts.102

Nepal

Surrounded by India on the east, south and west, the northern border of Nepal follows the approximate crest of the Himalayas, which form frontier with People’s Republic of China (Autonomous Region of Tibet). Nepal covers 141,000 sq. Km. The country contains three distinct geographical zones.103
Plain-is a mixture of forested and cultivated land that yield most of the country’s grains. Mid-altitude hills, mountains, and valleys are in the central sector. The great Himalayan Range runs across the northern third of Nepal.

Topographical contrasts are extremely sharp, from the low Terai through mountainous central Nepal, with an elevation averaging 1,220 meters, to the Great Himalayan Range, with an average elevation of more than 4,570 m. Many peaks exceed 7,620 m. in elevation, and the Mount Everest at 8,848 m, is world’s highest peak. Temperatures correspond to the physiographic divisions, ranging from Sub-Tropical to Alpine-Arctic. Most of Nepal is adequately watered by Monsoon rains. At Kathmandu, summer temperatures are moderate, rarely exceed 32°C, and winters are mild. The average annual temperature is 18°C. The variation in vegetation and fauna is a reflection of the altitudinal and climatic regions.\textsuperscript{104}

Ethnically the people of Nepal are predominantly Indo-Nepalese, and one-fifth of the population is Tibeto-Nepalese.\textsuperscript{105} The Nepali and the Newars, are the principal inhabitants of the Greater Kathmandu Valley area. In the Himalayas, Sherpas and Bhutias –ethnologically related to the Tibetans- are in the majority. Because of geographical proximity to India and strong cultural, ethnic and religious bonds going back to centuries, Hinduism is an accepted way of life overwhelmingly. About 89.4% of the population adheres to Hinduism and the rest are Buddhist and Muslim. The Buddhism is one of the old religions practiced in Nepal. It is mainly Mahayan Buddhism, which has travelled from adjoining Tibet. Buddhist population remains less than 2% in Nepal. Similarly the Muslim population has mainly, over a long period, migrated from Indian states of northern Uttar Pradesh and Bihar. They constitute about 10% of the Nepalese population.\textsuperscript{106} In addition to Kathmandu, only other two cities in the Nepal Valley –Lalitpur (Patan) and Bhakatpur (Bhadgaon)- have populations exceeding 40,000. Merely 5% of the country’s population is urban.\textsuperscript{107} Life expectancy (1990-95) is 54.6 (males 55.1, females 54.1). Birth rate per 1,000 populations has remained constant (39.8 during
1985-90 and 39.6 during 1990-95). Death rate per 1,000 has considerably decreased from 14.1 (1985-90) to 12.9 (1990-95).  

Primary education, beginning at six years of age and lasting for five years, is officially compulsory and is provided free of charge in government schools, secondary education, beginning at the age of 11, lasts for further five years, comprising a first cycle of two years and a second of three years. In 1993, the total enrolment at primary and secondary schools was about 77% of the school age population. There are two state universities, the Tribhuvan University in Kathmandu and the Mahendra Sanskrit Viswavidyalaya in Beljhurdi, Dang (founded in 1986), and one private university in Banepa. According to UNESCO estimates, the average rate of adult illiteracy in 1995 was 72.5% (males 59% and females 86.0%).  

Nepal’s efforts for development of science and technology began in 1951 from a state of stagnation without any institution or infrastructure. A transformation of the agro-based economy into industrial one is essential and this process demands more of new knowledge and skills apart from a change in the understanding and attitudes of the people. The National Council for Science & Technology is presently concerned with the formulation of national science policy, promotion of R & D activities in science and technology as well as propagation and popularization of scientific knowledge among the masses.

Nepal’s economy is mainly agricultural. According to FAO estimates a whopping 93.3% of the economically active population was employed in this sector in 1997. Only 16% of Nepal’s land is cultivated, about one-third is forested, and almost 40% is wasteland. The leading crops are sugarcane, rice, maize, wheat and potatoes. The vegetables are also grown. Land in Nepal Valley and on hillside terraces is intensively and widely irrigated. Tobacco is grown in low land and Terai region. Cardamom is grown in the eastern hills. According to FAO estimate there are 6,838,000 cattle, 3,278,000...
buffaloes, 919,000 sheep and 5,649,000 goats are reared, but animal husbandry is mostly limited in poultry raising.\textsuperscript{113}

Water is playing a significant role in the overall economy of Nepal. At present, it is being used for three major purposes - drinking, irrigation and electricity. Water pipelines for drinking purposes have recently been introduced only in major urban centers. As far as irrigation is concerned, very limited proportion of water has been used in irrigating merely 28\% of the total cultivated land of Nepal (i.e. 16\% of the total land area). Regionally, over 80\% of the irrigation facility is concentrated in the Terai plain. Another important use of water is associated with the generation of hydro-electricity. Due to being a mountainous country with several perennial rivers flowing through deep and narrow gorges, Nepal is immensely rich in water-power resources. Its potentiality has been estimated to be 83 million KW. Unfortunately, the power actually generated so far in the country is limited to merely 253,000 KW.\textsuperscript{114} In order to boost its production, several hydro projects including micro plants have been executed and some are still going ahead. Most of them are located in the central development region of the country.

The country has small deposits of lignite, copper, limestone, cobalt iron ore and Mica is mined in a limited way east of Kathmandu. Geophysical investigations have indicated that the Siwalik (or Shivalik) range and Terai belt are potential prospective areas for petroleum. Mining employed a miniscule 0.01\% of the labour force in 1981, and contributed 0.6\% of the GDP in 1997-98.\textsuperscript{115}

Manufacturing contributed 9.4\% of GDP in 1996-97. Based on a census of establishments engaged in manufacturing, the principal branches of the sector, measured by value of output, in 1996-97 were textiles—including carpets and rugs (accounting for 22.6\% of the total), food products (20.3\%), wearing apparel (excluding footwear and fur apparel 6.9\%) and tobacco products (6.7\%). Traditional cottage industries include basket making and production of cotton fabrics and edible oil. In 1996, according to estimates by
the World Bank, Nepal’s gross national product (GNP), measured at average 1994-96 prices, was US $ 4,710 m., equivalent to $ 210 per head.¹¹⁶

Tourism has grown in importance since the 1960s. Kathmandu with its road and air links with India attracts visitors with its examples of Lamist art and architecture. A growing number of hikers and mountain climbers are using Kathmandu as a major base for expeditions to Mount Everest as well as for hiking tours in the Middle and High Himalayas. Because of its rugged terrain, Nepal faces major transportation obstacles. Narrow-gauge railroads are confined to Terrai. An airport in Kathmandu handles domestic as well as international flights. The services sector employed 6.4% of the labour force in 1981, and contributed an estimated 37.8% of GDP in 1995-96. By 1996 tourism has emerged as Nepal’s major source of foreign exchange. In 1996 the number of foreign visitors reached an estimated 393,600, and receipt from tourism amounted to NRs. 8,990 millions. The year 1998 was designated as "Visit Nepal Year".¹¹⁷

Energy is derived principally from traditional sources, particularly fuel wood. Imports of mineral fuel and lubricants (mainly for transport sector), however, comprised an estimated 7.5% of the cost of total imports in 1996-97. In addition, Nepal’s rivers are exploited for hydroelectric power production, but in mid 1995 it was estimated that only 0.3% of the country’s huge potential generating capacity (i.e. only about 253,000 KW of a potential 83 m. KW) was being utilized. In February 1997 construction work began on 144,000 KW Kali Gandak, a hydroelectric power project, which has been Nepal’s largest one so far. Its estimated cost is of US $ 453 m., majority of which was to be paid by the Asian Development Bank and the Overseas Economic Cooperation Fund of Japan.¹¹⁸

In 1997, Nepal recorded a visible trade deficit of US $ 1,308.1 m, and there was a deficit of $ 418.1 m. on current account of the balance of the payments. In 1996 the principal source of imports (an estimated 27.4%) was India, while Germany was the principal market for exports (about 33.7%).
Other major trading partners were Hong Kong, Singapore, Japan and the USA. The principal exports in 1998 were manufactured goods and articles, basic materials, and minerals, food and live animals. The principal imports were machinery and transport equipment, chemicals and pharmaceuticals, and mineral fuel and lubricants.\textsuperscript{119}

Kingdom of Nepal is a heredity constitutional monarchy. It is the only state in the world having Hinduism as official religion. Till 1951, a hereditary Prime Ministership in the hands of Ranas controlled the government. Country was given its first constitution (under the King Mahendra) in February 1959 leading to country’s first election in the same month. The fledging democracy thus introduced could not survive for long and came to abrupt end in 1961. A new constitution was promulgated in 1962, which calls for a nonparty Panchayat (council) system of government; the highest legislative body was the 140 members National Panchayat. It was amended in 1967 and 1975. Demand for reforms gained momentum over the years and King Birendra Bir Bikram Shah Dev had to call referendum in 1980 in which voters approved retention of a modified version of existing Panchayat system. The Constitution was subsequently amended and the first direct parliamentary elections in 22 years were held in 1981. Under the provisions of a fresh Constitution promulgated in November 1990, Nepal became a constitutional monarchy. The Constitution provides for a bicameral Parliament, comprising of 205-member House of Representatives (\textit{Pratinidhi Sabha}) and a 60-member National Council (\textit{Rashtriya Sabha}), as the supreme legislative body. The House of Representatives is elected for a five-year term, and members of National Council hold office for a six-year term. Executive power is vested in the King and the Council of Ministers; the council is answerable to the House of Representatives. The King appoints the leader of the party that commands a majority in the House of Representatives as Prime Minister, while other ministers are appointed, from among the members of Parliament, on the recommendation of the Prime Minister. The biggest problem of governance in Nepal has been the lack of political institutions, which can legitimately
command effectiveness. There is no exception in this regard, including the king. The democratic experience is still in its infancy and no definite conclusion can be made about its success or failure.\textsuperscript{120}

There is a court of first instance, civil and criminal, at each district head quarter, as well as a court of appeal. There are three high courts – at Kathmandu, Biratnagar, and Nepalganj – to which further appeals may be taken. At the apex is the Supreme Court in Kathmandu: it is empowered to issue writs of habeas corpus and decide on constitutionality of law. The court is composed of a chief justice, assisted usually by two other judges, with seven additional judges in reserve; all are appointed by the King.\textsuperscript{121}

**Bhutan**

The landlocked Kingdom of Bhutan is located on the southern flanks of the eastern Himalayas. It is bordered on the south and east and west by India, and on the north and west by Tibet region of People’s Republic of China. Located between Assam-Bengal plains of India to the south and the Tibet to the north gives Bhutan considerable geopolitical significance. The country has an area of 47,000 sq. Km.\textsuperscript{122}

Country is mountainous, located where the Himalayas rise abruptly from subtropical lowlands of the Ganga-Brahmaputra plains of north India. Physically, country may be divided into three regions: the Great Himalayas, the Lesser Himalayas, and the Duars plains. The south of it includes a 16 Km. wide zone of alluvial sands and gravels that are known as Duars and are transitional between the lowland of the Indian plain and the mountain ranges of Himalayas. North of the Duars is a 65-80 Km. wide region occupied by the Lesser Himalayas, which ranges between 1,500 m. and 3,000 m. in height. This region is dissected by a series of fertile north-south valleys where most of the population is concentrated. North of the Lesser Himalayas are the Great Himalayas, which occupy about one-third of Bhutan, they have an average elevation of more than 3,000 m.\textsuperscript{123}
The climate at low altitudes ranges from humid sub-tropical in the Duars and Lesser Himalayan valleys below 1,050m. to a temperate zone with cool winters and hot summers at elevations between 1,050m. and 2,250m. Most people live in this temperate zone. A cold zone suitable only for summer grazing lies between 2,250m and the permanent snowline at 4,500m. The southern mountain slopes receive heavy summer rainfall of 5,100 to 7,600 mm. from winds of the summer Monsoon moving in from the Bay of Bengal across the plains of northern India.124

The dominant ethnic groups in the country are the Bhutia, who constitute 60% of the population and refer to themselves as Drukpas (dragan people). The Bhutias are related in language, religion and customs to the people of Tibet and inhabit the middle reaches of the main north-south valleys in the central parts of Bhutan. The second largest group is the Nepalese, constituting about 25% of the population, who live mainly in the southwest foothills. Other groups include a few Assamese and frontier tribes in the east and a primitive people known as Monpa. The national language is Dzongkha (a language of Tibetan origin). Virtually all Bhutia practice a form of Buddhism of the Drupka sect that is closely related to Tibetan Buddhism. Bhutan can safely be called as land of monasteries, and the 6,000 state-supported Lamas are highly respected.125

Bhutan still lacks good schools and colleges. Most of well-to-do Bhutanese - the politicians, bureaucrats and technocrats - are educated abroad, mainly India. Pre-primary education lasts for one year. Primary education begins at six years of age and lasts for seven years. Secondary education, beginning at age of thirteen lasts for a further four years, comprising two cycles of two years each. In 1995, according to UNESCO estimates, the rate of adult illiteracy in Bhutan averaged 57.8% (males 43.8% and females 71.9%) Birth rate per 1,000 during 1980-85 was 41.6% and death rate per 1,000 during the same period decreased from 19.2% to 15.2% during 1990-95.126
The application of science and technology for economic development is still in a formative stage in Bhutan. The country’s late start in socio-economic development on modern lines coupled with numerous constraints such as paucity of internal financial resources, difficult terrain, poor communication facility, shortage of labour, lack of sufficient number of trained technical personnel and low level of education, have impeded the proper utilization of science and technology for development purpose. In its present stage of development, the country is not in a position to organize any meaningful research to evolve its own appropriate science and technology. Indeed, for many years it will have to depend upon other countries for science and technology for promotion of its socio-economic development.\(^{127}\)

Economically, Bhutan is one of the world’s least developed countries. It is an agricultural economy where less than 10% of the land is cultivated, and about 95% of the labour force is engaged in largely subsistence agricultural activities. The principal food crop is rice, maize and potatoes. Crops raised for export include cardamom, apples and oranges. Animal husbandry is important, large number of yaks, sheep, pigs, goats and poultry are raised in the valleys and on mountain pastures. It contributes 36.5% of GDP in 1997.\(^{128}\)

Manufacturing activities comprises mainly of traditional handicrafts such as paper making, carved lacquer woodworking, and intricate metal and leatherwork. This sector contributed 36.7 of GDP in 1997. In 1961 the country embarked on a series of Five-Year development plans financed mostly by India.\(^{129}\) Initial emphasis was on expanding education and health care and developing all-weather roads, hydroelectric-power facilities, and small-scale industries such as timber, mineral, and food and beverage processing. By the 1980s the focus had shifted to the improvement of agricultural and animal husbandry in an effort to achieve self-sufficiency.\(^{130}\) In 1996, according to estimates by the World Bank, the Kingdom’s gross national product (GNP), measured at average 1994-96 prices, was US $282m, equivalent to $390 per head. In 1990-96 GNP per head increased, in real terms, at an average annual rate of 2.0%. During the same period the population increased by an annual
average of 2.9%. Estimated GNP in 1997 was $297m ($400 per capita). Bhutan’s gross domestic product (GDP) increased in real terms by an annual average of 7.5% in 1980-90. GDP grew by 7.5% in 1995, by 6.1% in 1996.\textsuperscript{131}

Numerous rivers and streams criss-cross the country and all the rivers of Bhutan have their sources in glaciers at high altitudes and therefore have an evenly distributed discharge unlike in the case of purely rain fed Rivers. Sustained discharges and the large drop in the river system from upper Himalayas to the Duars in the south are favourable conditions for development of hydro-power and that too at cheap rates. However due to the difficult terrain and severe climatic conditions, the vast hydro-power potential of the country has remained untapped. The rivers also provide plentiful water for irrigation in the valleys. Bhutan has been able to harness at least some of their hydro-power resources through Indian cooperation. Chukha project 336 MW outstanding example of this cooperation. India is also engaged in constructing the Tala project of 1020 MW capacity. The sale of surplus power to India in highly power deficit areas of West Bengal, Orissa and North-East has been the hallmark of Chukha project.\textsuperscript{132}

Bhutan traditionally traded with Tibet across the high mountains passes separating the two countries. Since the 1959, when the border with Tibet was closed, most trade has been with India. Bhutan is a land-locked country. The viable trade routes by land and sea can only be through India. So most of its trade is dependent on India. Following an agreement with India in 1978, trade links were extended to Bangladesh and Nepal. Bhutan was opened to tourists in 1974, tourism soon surpassed the sale of stamp collectors as the chief source of foreign exchange.

In the financial year ending 30 June 1999 Bhutan recorded a trade deficit of an estimated $56.4 m, and there was a deficit of an estimated $86.9m on the current account of the balance of payments. In 1997-9 the principal source of imports (70.5%) was India, which was also the principal market for exports (90.7%). The principal exports in 1997 were electricity,
calcium carbide and particle-board. Exports of electric energy to India commenced in 1988, with the inauguration of the Chukha hydroelectric project. The principal imports in 1996 were rice, diesel oil, vegetable fats and oils.133

There is hardly any evidence of running the state on the lines of a modern nation-state. There is no concept of promotion of any type with guaranteed rights to its citizens. The decision-making is done at the level of King with some occasional influence of clergy. Bhutan’s state system is a modified form of constitutional monarchy, without a formal, written constitution. The system of the government is unusual in the sense that the power is shared by the monarchy (assisted by the Royal Advisory Council, known as Lodoi Tsokde), the Council of Ministers (Lhengye Zhungshog), the National Assembly (Tshogdu Chenmo) and the Head Abbot (Je Khempo) of Bhutan’s 3,000-4,000 Buddhist monks.134

Important institutional changes were introduced at the 76th session of National Assembly in July 1998.135 In accordance with a royal decree, King Jigme relinquished his role as Head of Government (while remaining Head of the State) in favour of an elected Council of Ministers, which was to enjoy full executive powers (although the King was to retain authority with regard to strategic security issues) and was to be headed by a Chairman (elected by ministers, on rotational basis, for one year period), who would be Head of Government. The new Council of Ministers was, subsequently, elected by the National Assembly by secret ballot. The King awarded the portfolios of the elected ministers. The term in office of a minister was to be five years, after which he would be obliged to undergo a vote of confidence in the National Assembly (previously there was no time on the tenure of ministerial posts).

The National Assembly, which serves a three-year term, has 150 members, including 105 directly elected by adult suffrage. Ten seats in the Assembly are reserved for religious bodies, while officials, ministers and members of the Royal Advisory Council occupy the remainder.
Continental South Asia is thus a mosaic of races and cultures, cults and customs, faiths and tongues, with a vast gap between the rich and poor and between educated and the illiterates. Despite this diversity there is considerable degree of unity as to common historical bonds, cultural similarities, economic necessities, and common interest of region bind all these countries together.

More importantly these countries share similarity of weather and climate. Their agriculture, hydro – power generation, river navigation, and availability of water for domestic/industrial use highly depend on their shared dependence of Monsoon. Being developing economies and with erratic availability of water it becomes incumbent upon these countries to properly utilize and manage their water resources.

Before that, we need to assess the water resources of the region, which we take up in the next chapter.

References
2. Ibid, p.14
3. Ibid, p.18
6. Ibid, p.4
10. H.J. Mackinder (1861-1947), a Scottish geographer, considered many of Captain A.T. Mahan’s positions unsound. Mahan thought that sea power would
always be the essence of power, whatever was done on land. Mackinder in 1904 read a paper entitled “The Geographical Pivot of History”, in which he expressed the view that the Eurasian Core (then named the Pivot Area but later to be called the Heartland) was unaccessible to the ships of sea powers and thus capable of shattering a great land power which might have come to control the world. Its rivers drain into the Arctic; distances to the oceans are huge, and only the Baltic and Black Seas could form avenues of sea power penetration, but they are easily defended.

Mackinder described his Eurasian Pivot Area as the source of powerful forces that had affected Europe, South Asia, and the Far East. And his famous hypothesis was:

Who rules East Europe commands the Heartland
Who rules the Heartland commands the World - Island

For above statement see Blij, H.J: SYSTEMATIC POLITICAL GEOGRAPHY (N.Y.) 1967, p. 106.


13. The Andamans were officially colonized by the East India Company in 1789, but owing to inhospitable climate, the station was closed in 1796. It was reopened as a penal settlement in 1858 when Dr. James Pattison Walker reached here on 10 March, along with 200 convicts, and other paraphernalia. Part these convicts were encouraged to marry here so that they are not inclined to go back to the mainland. In order to develop the resources of the islands, it was necessary to encourage people to migrate here. See, Singh, Iqbal: THE ANDAMAN STORY (New Delhi) 1978, pp. 57-72.


15. Lying entirely in the northern hemisphere, the mainland extends between latitudes 8 degrees 4 minutes and 37 degrees 6 minutes north, longitudes 68 degrees 7 minutes and 97 degrees 25 minutes east and measures about 3,214 Km. from north to south between the extreme latitudes and about 2,933 Km. from east to west between the extreme latitudes.


19. INDIA 2000 – A Reference Manual, op. cit., p.1. In May 1962, Pakistan and People’s Republic of China announced their decision to conduct negotiations for the delimitation and demarcation of their common border (The Statesman 3, May 1962). India lodged strong protests with both China and Pakistan and questioned later’s right to negotiate on that portion of the boundary between India and China west of the Karakoram Pass which was under Pakistan’s occupation. “The Government of Pakistan”, India asserted, “are obviously not entitled to negotiate with China or any other country about territory which is not their own”.

The Chinese Government defended both the right of Pakistan to negotiate the boundary treaty and its own action in entering into negotiations with Pakistan. In any case China and Pakistan continued the process of rapprochement with view to isolating India. A boundary agreement was signed in March 1963 (For details of the agreement, The Indian Express 7 July, 1963) by the terms of which Pakistan gave up title of about 13,000 Square miles of territory, all of which had been under Chinese occupation, and was “rewarded” by about 750 square miles which Peking (now Beijing) graciously agreed to evacuate out of the disputed territory already in its possession. India protested vigorously against the border agreement. For details see Dutt, V.P: CHINA’S FOREIGN POLICY 1958-1962 (Bombay) 1964, pp. 227-33.

At a ceremony at Baltit in Hunza on 16 February 1971, the Karakoram Friendship Highway was declared open and said to have replaced the old caravan silk route. Hewn out of rocky - mountains, road is all weather highway capable for the most part of carrying two-way traffic. Joining with the Indus Valley road, it connected Rawalpindi in Pakistan with towns in Sinkiang.
province in China. India contended that the road links represented a Sino-
Pakistan threat to Indian security. For details see Syed, Anwar Hussain:
CHINA AND PAKISTAN, Diplomacy of an Entente Cordiate (London,) 1974,
pp. 136-37.
22. For terrain of South Asia see A Historical Atlas of SOUTH ASIA (New York)
23. ENCYCLOPEDIA OF THE NATIONS, Asia and Australasia (London) 1976,
pp. 83-84.
25. Ibid.
26. WORLDMARK ENCYCLOPEDIA OF THE NATIONS (New York) 1984,
vol. 4, p. 86.
27. Manley, Gordon (ed): GEOGRAPHY- Our Planet, its peoples and Resources
(London), pp. 226-27
28. English, Paul Ward: WORLD REGIONAL GEOGRAPHY, a question of place
(New York) 1977, pp. 113-17
29. INDIA-2000, op. cit., p. 3.
30. Robinson, Francis: THE CAMBRIDGE ENCYCLOPEDIA OF INDIA,
32. Spate and Learmonth, op.cit., pp. 150-71
33. Ibid. Also see United Nations, WORLD POPULATION PROSPECTS, The
35. Ibid., pp. 40-41.
36. THE FAR EAST AND AUSTRALASIA (Kent) 1987, pp. 382-83
38. UN, WORLD POPULATION PROSPECTS: The 1996 Revision.
39. Gaur, K.D: DYNAMICS OF INDIAN ECONOMY, Socio-Economic
40. INDIA-2000, p.223.
41. Dutt, Ruder: INDIAN ECONOMY (New Delhi) 2000, Tapan Raychaudhuri,
‘Historicals Roots of Mass Poverty in South Asia, A hypothesis’, Economic
and Political Weekly (Bombay) 4 May 1985, pp. 801-06.
42. Malthus, T R: AN ESSAY ON POPULATION (London) vol. 1, 1958, pp. 5-
145. Also see Uppal, J.S: INDIA’S ECONOMIC PROBLEMS, An analytical
approach (New Delhi) 1985, pp. 3-38.

44. INDIA-2000, p.133.


51. Ibid.


53. THE EUROPA WORLD YEARBOOK 1999, p. 1725. Also see INDIA BUSINESS THROUGH THE AGES, Federation of Indian Chamber of Commerce and Industry (Delhi) 1999.


59. Rounaq Jahan examines the problem of national integration in Pakistan. She analyses why former President Ayub Khan’s constitutional innovations, economic policies, and approaches to bureaucratic recruitment and political participation were inadequate and even contributed to the disintegration of

63. THE FAR EAST AND AUSTRALASIA, op. cit., p. 799.

Ibid.
74. EUROPA YEARBOOK, 1999, pp.2742-43. Also see IMF, International Financial Statistics. For the economic health of the country see STATE BANK OF PAKISTAN, Annual Reports.

Ibid. Also see SOUTH ASIAN ASSOCIATION FOR REGIONAL COOPERATION (Kathmandu) October 1987, p. 71.
76. Ibid. Also see ASIAN DEVELOPMENT OUTLOOK (Manila) 1999.
79. Akbar, M K: PAKISTAN, From Jinnah to Sharif (New Delhi) 1997. Also see Arif, Khalid Mahmud: WORKING WITH ZIA, Pakistan's Power Politics (Karachi) 1995. Also see Attaf Gauhar, AYUB KHAN, Pakistan's First Military Ruler (Oxford) 1996. Also see Louis D. Hayes: STRUGGLE FOR LEGITIMACY IN PAKISTAN (Lahore) 1986. Also see Burke, S M: THE BHUTTO YEARS (Lahore) 1983.


82. Ibid.

83. On emergence and history of Bangladesh a large number of works are available, particularly noteworthy among these, however, is Chouwdhury, Subrata Roy: THE GENESIS OF BANGLADESH (Bombay) 1972. Also see Broomfield, John H: ELITE CONFLICT IN A PLURAL SOCIETY (Berkeley) 1968. Also see Sisson, Richard and Rose, Leo: WAR AND SECESSION, Pakistan, India and the creation of Bangladesh (Berkely) 1990.


86. Ibid.


93. BANGLADESH Paper in ESCAP NATIONAL PAPERS, op.cit.


96. Ibid.

97. THE EUROPA YEARBOOK 2000, vol.1, p.581-82. Also see IMF, International Financial Statistics. Further see UN, Statistical Yearbook for Asia and the Pacific. U.S. exploration form Unocal is pushing for a pipeline from Bangladesh, where it has found huge reserves of gas. But Dhaka has yet to decide whether it has enough gas to export without compromising on its own long-term energy needs. Energy hungry India has contemplated importing natural gas from several countries, including Bangladesh. (see The Economic Times, New Delhi, 4 July 2001)


102. Ibid.


104. SOUTH ASIAN REGIONAL COOPERATION, op. cit., p. 55. Also see Stamp, L Dudley, op. cit., pp. 116-17.


106. For details see Karan and Jenkins, op. cit.


108. Ibid., Also see STATISTICAL YEAR BOOK OF NEPAL (Kathmandu) 2000.


110. NEPAL Paper in ESCAP NATIONAL PAPERS FOR UNCTAD, op. cit.
111. Shrestha, S H: NEPAL IN MAPS, op. cit., pp. 38-43. Also see ASIAN

S.H.Shrestha, Former Professor of Education Service, HMG/NEPAL writes in
NEPAL IN MAPS (Kathmandu) 2000 that 81% population is engaged in
agriculture.


116. Ibid. Also see FAR EASTERN ECONOMIC REVIEW, ASIA 1999
YEARBOOK.

117. Ibid. Also see Shrestha, S H: NEPAL IN MAPS op. cit., p. 49.

118. Ibid.

119. Ibid.

120. Rose, Leo: NEPAL, Strategy for Survival (Delhi) 1971, pp. 75-102. Also see
Regmi, D R: MODERN NEPAL (Calcutta) 1975; Sharan, P: GOVERNMENT
AND POLITICS OF NEPAL (New Delhi); Kumar, Satish: RANA POLITY IN
NEPAL (Bombay) 1967; Chatterji, Bhola: PALACE, PEOPLE AND
POLITICS, Nepal in Perspective (New Delhi) 1980; Baral, L R: 
OPPOSITIONAL POLITICS IN NEPAL (New Delhi) 1977; Saha, Rishikesh: 
NEPALI POLITICS, Retrospect and Prospect (New Delhi) 1978.

121. WORLDMARK ENCYCLOPEDIA OF NATIONS (1976), vol.4, p.250

122. STATISTICAL YEARBOOK OF BHUTAN (Thimpu) 1989, p. 11. Also see
Bhattacharyya, Dilip: BHUTAN, The Himalayan Paradise (New Delhi) 1975,
pp. 14-16.


124. Ibid.

125. White, J Claude: SIKKIM AND BHUTAN (Delhi) 1971. Also see
Ronaldshay: HIMALAYAN BHUTAN, SIKKIM AND TIBET (Delhi)
1977. Further see Haq, Mabbulul: HUMAN DEVELOPMENT IN SOUTH 

126. U N, World Population Prospects: The 1996 Revision. Also see LAND AND
PEOPLE, op. cit., pp. 224-25. Further see Karan, P P: BHUTAN, A Physical 
and CULTURAL GEOGRAPHY (Lexington) 1967.

127. BHUTAN Paper in ESCAP NATIONAL PAPERS FOR UN CSTAD.

Samarasinghe, “Bhutanese Economy in Transition” in Asian Survey, vol. xxx, 
No.6, June 1990. pp. 560-75. The first national account for Bhutan were 
prepared for the year 1981, which means no figures of this type are available to 
assess economic growth for the first two decades.

129. Ibid.

130. Ibid.

51
131. Ibid. Also see different reports of Geology and Mines Division, Ministry of Trade and Industry (Bhutan)


