Chapter I

GEOGRAPHICAL FRAMEWORK
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Afghanistan today retains two essential geopolitical considerations which were inherited from its history. These were both strategic and arose from her physical configuration and location in Central Asia. First, as a focal point of great trade route, it became the foothold of various conquering forces for invasion of the Indian subcontinent. Secondly, since the rise of Russia as a great power and the overseas colonial, economic and political expansion of Britain, it has become a zone of recurrent political and armed conflicts in the nineteenth century and of rivalry in the peace-time in the twentieth century as a result of the growing American interests in this region.

Although, it was not coveted for its resources but as a zone whose inclusion would have tilted the balance of power between the major powers. This has imparted Afghanistan, its third geopolitical characteristics, for it is now able to attract economic assistance and foreign investments from different quarters in its economic development. These factors suggest and demonstrate that "...the location of a country... is always the supreme geographical fact in its history...", and that even if the natural environment gives a definite basic characteristics to the state, "...the political value

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and implication of... (its location is) ... continuously changing

**Location**

In all, there are twenty-seven landlocked states in the world (see Appendix II). Their distribution continent-wise is:

- **Africa** ... 13
- **Europe** ... 7
- **Asia** ... 5
- **South America** ... 2

Afghanistan's land area (650,000 sq. kms.) is second only to Mongolia and has the largest population among the landlocked states in Asia. It is located in the southwestern corner of Central Asia (Map No. 1). Lying on the northern subtropical zone, it extends from 29°21'N to 38°30'N latitude and from 60°31'E to 75° East longitude. It is bounded on the north by the U.S.S.R.; on the west by Iran; on the south and east by Pakistan; and, in the extreme northeast (in the Wakhan region) with the People's Republic of China.

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3 Afghanistan does not recognize Pakistan as its southern and eastern neighbour. As the Trans-Indus region from Chitral through Northwest Frontier Province to Baluchistan is inhabited by various Afghan and allied tribes, Afghanistan recognizes this area, termed Putschistan, as its southern and eastern neighbour. Afghan publications clearly emphasize this feature.
The impact of interior location has remained apparent ever since it emerged as an independent state in 1747. It was established on the ruins of Persian, Moghul and Uzbek empires. It failed to perceive the threat posed by the territorial expansion of Britain and Russia in Central Asia and was caught in the power struggle between the two essentially European politico-territorial systems. As a result of the active forward policies of Britain and Russia, both the indigenous and exogenous forces undermined the stability as well as the survival of Afghanistan as an independent state. It also introduced a new power equation where Afghanistan had no active role to play.

Afghanistan commanded few routeways which linked it with developed areas. Closest to the sea, lay its most intractable terrains, farthest from the marine contact and communication were its major commercial and agricultural regions (for example, the Kabul Valley and Northern Afghanistan). The general topographical features of Afghanistan played a dominant role in disassociating the underdeveloped southern half of the country from the developed northern Afghanistan; thereby reinforcing the political separation of the highland from the coast.

Cast upon such a geopolitical situation and with the resurgence of regional individuality and consciousness among the inhabitants of the state, the efforts of the Afghan rulers to consolidate their power were frustrated. Within the state
itself, the links between the various provinces and regions were tenuous and weakened by distances and physical barriers.

In the process, the internal political instability coupled with external political and territorial pressures compelled Afghanistan to accept singularly inappropriate distribution of territory. The definition of the boundaries (1873-95) and the subsequent boundary adjustments between Afghanistan and the colonial powers reflected the strategic, administrative and economic conveniences of the negotiating powers, viz., Britain and Russia.

Afghanistan's central location was of serious practical disadvantage. The failure of the Afghan regimes to incorporate Baluchistan and North-West Frontier into its own territory in the nineteenth century can be regarded as the single-most obstacle to its subsequent external relations. The ownership of these areas, perhaps, could well have led to a more tenable territorial claim towards the Indian Ocean coast,

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4 The boundary adjustments deprived Afghanistan of valuable pasture lands and irrigation network in the North West Frontier with Russia in 1886. In 1895, the trans-Coxus regions of Shignan and Darwaz was transferred to Russia. This loss was compensated by Wakhan strip which was actually meant to separate the British and Russian territories from each other. In the southern and eastern frontier, with Britain (1895), the division of the contiguous tribal area not only resulted in the political division of the inhabitants of Afghanistan but also created administrative and economic problems. The political division of the traditional Afghan habitat, therefore, became the primary consideration in the Afghan foreign relations with Britain and later with Pakistan.
which could have enabled it to retain the access to the sea by recognized treaty agreements.

The resultant stagnation of the continental interior reflected the impact of peripheral forces. It also indicated the highly volatile character of the internal political dynamics. The rival regional interests and the persistence of widely dispersed and diversified population groups. These combined to realign the political forces and action groups of the landlocked Afghanistan. An amalgam of different cultural and ethnic groups, Afghanistan's internal sub-divisions could not combine to form an effective political unit. The constituent units asserted political separation many a time when the central authority was either weak or was contested by the rival claimants. Though, through the political isolation (1880-1919 as well as from 1930 to 1946) it was able to establish a framework of political order and stability, it failed to share the advantage of direct contact with the sea routes which brought benefit from the increased mobility and technological advances; thereby retarding the growth of organization and power of the Afghan state.

For more than a century, Afghanistan's physical and cultural isolation stressed the internal political weaknesses, accentuated grievances and stifled economic development. With few exceptions, the influence of the major development undertakings sponsored by the littoral states (development plans undertaken by Pakistan in the North-West Frontier Province and
Baluchistan) in their own continental interior has been readily felt by the peripheral areas of Afghanistan. Yet the effectiveness of the resources exploitation with Afghanistan remained closely linked with the external communications. Slow but gradual development of Afghanistan's internal transportation and communication network indicated the minimization of disadvantages of the location by inducing the landlocked state into wider continental circulation.

Analyzing the wider implication of location, it is evident that, where independent survival introduced so little a change in the social and economic structure of the country, the negative forecasts were confirmed by the politico-economic instability characterizing the Afghan political scene. Political intrigue and conspiracy, turmoil, and threatened secession — whether Kabul and Kandahar or Afghan Turkistan and Herat — formed a recurrent theme in the Afghan political history. The dubious character of the various Afghan regimes necessitated the maintenance of some degree of regional ethnic and racial balances. These in turn became the indicators of the struggle to appease the pressure groups and the various other factions, dominating the national and regional political scene.

In internal and external communication networks formed the weakest link of the Afghan political and economic geography. Along with the impact of physical relief, it remained as the single most obstacle for the economic and political development of the state. There was no marked determination
in the nineteenth and early twentieth centuries Afghanistan
to connect the various regions with rail or road network nor
was any attempt made to link the country with external com-
munication network. It retained strategic and political sig-
nificance till such time as permitted by political climate of
the state, when the need of it was deeply felt as in 1930s and
in 1950s. Nevertheless, one cannot ignore the railroad links
to the selected terminal points which Afghanistan later ac-
quired nor the country's crucial difficulties that hindered
the economic development. Though there are other factors
which restricted the Afghan achievements, most of these prob-
lems aggravated the political isolation of major industrial and
commercial urban nodes from the nearest accessible seaports
and from each other. It is, then, clear that the conduct of
the Afghan foreign relation was the expression of internal
political imbalances and the problem of communication and out-
let to the sea.

Access to the sea, by direct or indirect means became
a priority in the conduct of the Afghan foreign relations.
Indeed, Afghanistan's list of nineteenth and twentieth centur-
ies boundary problems and disputes was closely related to the
country's attempt to secure internationally recognized free and
permanent access to the high seas. Much depended upon the
attitudes of the immediate neighbours (particularly Pakistan);
and in the then era of territorial expansion and continental
economic exploitation the presence of three neighbours was an
added problem to Afghanistan. It imposed restraint (upon Afghanistan) which lacked advantage of increased competition and co-operation that such a location could have afforded in other circumstances. This resulted in Afghanistan's negotiating from the position of weakness, and discovered to its cost that compromise was thereby denied.

In this locational struggle, Afghanistan was compelled to accept the subordinate role in the decision-making processes affecting the transit trade and economy. To avoid the dangers or overdependence of the transit route through Pakistan, Afghanistan was able to explore a viable alternative transit route through the Soviet Union, and "...the net effect of Afghanistan's transit agreements and closer trade relations with the Soviet Union has...undoubtedly improved Afghanistan's bargaining position, politically as well as economically. By developing an alternate source of petroleum products and manufactured goods, and alternate land and air routes to Europe, Afghanistan has been able to bring pressure on the West, and so on Pakistan, to keep open the routes to Farah. This was a major achievement "...for a nation with Afghanistan's limited resources and very difficult geographic position...." Afghanistan, then in terms of internal economic development


6 Ibid., p. 15.
and international trade, has a long way to go before it can effectively bargain the transit facilities with the neighbouring states and exploit this particular feature of the location to its own advantage.

However, attempts have been made in recent times to increase the country's outlets to the outside world. This led to the widening of the options available to foreign trade. It enabled Afghanistan to adopt a policy of attracting investments for the growth and development projects; "...but the multi-sided foreign aid operated in a manner that forced the thin layer of Afghan leadership, which possesses the intellectual and technical competence to tackle the problems of development,...co-ordinating, negotiating the foreign groups.... This has left...(the Afghan leadership)...little margin to devote to... problems of internal politics and administration...." Therefore, its success depended upon the careful selection and realization of certain internal economic programmes which provided a convincing economic basis for Afghanistan's external political relationships and means to release the country's periphery from the economic orbit of the neighbouring countries.

Geology

Although the detailed study of surface configuration and

their causation lies outside the purview of political geography, the knowledge of its influences is helpful in assessing the inter-relationship within the state of Afghanistan. The diastrophic movements have given rise to numerous long and parallel fault lines which had not only structurally divided the country but also determined the distribution of mineral resources of the state (see map No. 2). This distribution ultimately influenced both the physical characteristics of the inhabitants as well as the economic and consequent impact upon the foreign relations of Afghanistan.

Table No. 1 presents the geological details of the country in a nutshell and this should be sufficient to provide a base for much more important aspects of geology, i.e., the economic geology, which has deeper influences on the spatial economic differences. However, it is necessary to add here that in the absence of adequate geological investigations in the case of Afghanistan, it would be difficult to discuss the spatial distribution of mineral wealth of the country in a rather systematic way.


# Geological Background of Afghanistan

**Table I**

<table>
<thead>
<tr>
<th>Era</th>
<th>Periods</th>
<th>Deposits</th>
<th>Location</th>
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<tbody>
<tr>
<td>Tertiary</td>
<td>Quaternary</td>
<td>Aeolian, Alluvial and Lacustrine deposits; Sedimentary rocks of Neogene, Sil, Sandstones, conglomerates, gravel and Talus</td>
<td>Langrahar, Kunduz, Taloqan Khanabad, southern part of Hazar-i-Sharif, northwest of Maimana, southeast of Ghazni, Ab-i-Istada, the basins of Hari Rud and Khash Rud, Islam Qala, Zindajan, Farah, Chakhansur, Dasht-i-Nargo, Garmsir, Balkh, Andhkoi, Herat and Kabul</td>
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<tr>
<td></td>
<td>Pliocene</td>
<td>Littoral, alluvial and lacustrine deposits; Sandstones, conglomerates,</td>
<td>Southwestern, Central, Northwestern and North of Koh-i-Baba, Southern Dasht-i-Arbo, Eastern Pakhtiya and Eastern Kabul</td>
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<tr>
<td></td>
<td>Neogene</td>
<td>Neogene, Sil, Sandstones, conglomerates, gravel and talus</td>
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<tr>
<td></td>
<td>Cretaceous</td>
<td>Limestones, Shales, Conglomerates, Sandstones and Volcanic deposits</td>
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<tr>
<td>Mesozoic</td>
<td>Cretaceous</td>
<td>Metamorphic, Gneiss, Mica, Schists; Sandstones, Limestones, Phyllites and Coal</td>
<td>Spinghar, South Langrahar, Kandesh, Konar, Badakhshan, Central Plateau, Paropamisus, Siah Koh, Hindukush, Wakhan, Western Kabul, Kapisi, Laghman, Panjshir and Ghorband</td>
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<tr>
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<td>Jurassic</td>
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<td>Triassic</td>
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<td>Pre-Cambrian</td>
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The known exploitable mineral resources in Afghanistan are limited. The minerals are found in association with sands and shales of the Oxus region, and in metamorphics, basalt and intrusive rocks of northeastern, north central and southeastern parts of the country. Apart from these major areas, the mineral resources are absent in the pre-dominantly flysch regions of southern and western Afghanistan (see Map No. 3).

The significance of this uneven distribution of mineral resources is evident from the heavy emphasis of the various development plans upon the geological explorations and improvement of transportation facilities. Although new areas of mineral occurrences have been discovered and exploited, yet there persists acute regional imbalances (see Ch. IV). As noted later, the benefit of the developed mineral resources of the northern and northeastern regions are in no way shared by the other regions of the state. This is largely due to formidable barrier in the form of the central mountain system which permits few accessible routes connecting the northern half with rest of the country.

As a result, the potential tendencies of political and economic alienation of the different regions of the state are strengthened. It also reflected in their varied historical and cultural developments. Further, the concentration (or the absence) of mineral resources and the favourable (or unfavourable) geological basis of the land forms brought the different regions of the state under the influences of the neighbouring
AFGHANISTAN
PHYSIOGRAPHY

LEGEND
IN METRES
< 4500
> 4500
2700
1500
900
600
300

PHYSICAL REGIONS
I
NORTHERN AFGHANISTAN
II
SOUTHERN AFGHANISTAN
II-A
EASTERN AFGHANISTAN
II-B
WESTERN AFGHANISTAN

MAJOR RIVER BASINS
A
OXUS RIVER BASIN
B
KABUL RIVER BASIN
C
SEISTAN BASIN
D
HARI RUD BASIN

SCALE
0 60 120 180 km
Source: N. Vavilov & D. Bukinich; "Agriculture of Afghanistan" (Moscow, 1956)
states. It is clear from the present day spatial pattern of economic activities in Afghanistan (apart from other considerations such as strategic and political), that regions under different spheres of neighbouring influences have both geological and geographical contiguity and which tends them to lean more to the contiguous areas rather than to unite with the different regions of the state to form a homogeneous unit (for example of Amu Darya basin of North Afghanistan which is fairly well endowed with mineral resources forms a part of the Amu Darya oil belt of the Soviet Union).

The geographical factors have played a significant role in shaping the national character and political outlook of Afghanistan. It inherited a harsh terrain and austere climate as well as the consequences arising from the crossroad location in Central Asia. These influences were impressed on the Afghan society and was expressed in the form of survival and strong sense of independence among the tribal inhabitants, within the overall pattern of ethnic and culturally heterogeneous population. Though the natural resources have given incentive for industrial development, environmental factors remain to hamper the Afghan attempts to build a strong political system and viable economic state.

Relief

Afghanistan is a mountainous country with more than 40 per cent of the total land area above 2000 metres. It has
only 22 per cent of the total land area or 14 million hectares as potential cultivable area with predominantly agrarian economy, on which more than 85 per cent of total population depended on agriculture for their living and provides about 87 per cent of total commodity exports of the landlocked state. The Afghan relief is a "desolate belt of mountain ranges, salt steppes, and irregular playas, all of which are for most part uninhabited or very sparsely populated". The Afghan relief is dominated by the mountainous backbone and their offshoots; thereby forming a barrier between Central and South Asia. The desolate terrain of southern and western Afghanistan performs a similar function — a zone of separation between the Middle East and South Asia and marks the eastern limit of the Middle East.

Afghan topography can be divided into the following regions (see Map No. 3):


11 The Afghan relief has also been divided by Dudley Stamp (Asia, a Regional and Economic Geography, London, 1967, pp. 179-81), into six distinct regions and by W.K. Fraser-Tytler (Afghanistan: A Study of Political Developments in Central and South Asia, London, 1967, pp. 6-7) into four principal river systems. Survey of Land and Water Resources: Afghanistan, 6 vols. The Food and Agriculture Organizations of the United Nations (Rome, 1965), classifies the physical according to elevation. The basis of the present classification is based on the fact that though each sub-division shows certain degree of similarity, they are distinctly separated from each other. Further, the mountain.

(footnote contd.)
1. The Mountain Systems

2. The River Basins

   a) The Oxus River Basin
   b) The Kabul River Basin
   c) The Seistan Basin
   d) The Hari Rud Basin

The central mountain system and its offshoots dominate the landscape of the country. It forms the main watershed for the important rivers of Afghanistan. The pattern of mountain systems demarcate the major river basins and at the same time remain as distinct features. Their diffusion from the foci is followed by decreasing elevations and ruggedness of the terrain and is repeated in the upper and to some extent in the middle reaches of the major river basins. The northeastern section of the system, the Hindukush range, begins as the Muztagh range in the Pamirs. It is a mighty mountain with impassable snow-bound peaks and deep precipices, but in its south-western approach, it is less significant to its own spur, the Shundar range. It becomes prominent only when it reaches a point northwest of Kabul in the Shibar pass where it gives way to the Koh-i-Baba. The Hindukush up to Shibar, are the highest mountain ranges in Afghanistan, whose average elevation exceeds 4000 m. above sea-level. Westwards of this important section, the mountain system gradually decreases in

systems have been taken as a separate unit, solely due to the reason that they act as the important water-parting of the state. The unproductive wastelands are included in the river basins to facilitate the analysis. (see Map No. 2)
elevation to run out in series of low hills and ridges along the Hari Rud. The entire distance traversed approximates 960 kms. and is connected by low ridges with the mountain system of Iran. The central mountain massifs have an average width of about 400 kms., i.e., from Peshavar to Kunduz. In the southwestern section this width increases.

It is basically "...a wild desolate, little known country, a country of great peaks and deep valleys of precipitous gorges and rushing grey-green rivers...." Lofty transverse mountain ranges under permanent snow cover and deep narrow valleys render communication difficult and give few choices for population concentration. Although, the Hindukush has numerous passes (about 8 to 10) in its earlier course, Killik Pass (to Hunza), the Daroghil Pass (to Gilgit) and the Dorah Pass (to Chitral), are by far the most important and accessible passes. In its main axis, the Khawak, Bazarak, Shibar, Bamian, Hajigak and Palakand passes provide gaps through which Kabul river valley is connected with Balkh and Kunduz.

The cluster of near parallel ranges which constitute the Hindukush splays westwards. The Salang range transversing west southwest to the north of Bamian and the Mir Samir range after crossing the Charikar gap, bifurcates into the Paghman

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12 Fraser-Tytler, n. 11, pp. 5-6.
range and joins the Koh-i-Baba. The Paghman range projects southwestwards to separate the basin of the river Helmand from that of the Arghandab, and extends into the arid southern Afghanistan. The Safed Koh or Spingar mountains, projects eastwards from the southern Hindukush, skirting the basins of Helmand and Arghandab, passes near north of Ghazni to follow the 34th parallel to form in part, the Afghan boundary with Pakistan. It is separated from the main Hindukush range by the valley of Kabul river. Salt range commences from the southeastern side of the Safed Koh and trends a southeasternly direction to Kala Bagh in Pakistan.

Sulaiman mountains commence from the Safed Koh. The high ranges of the mountain trend south-southeast and pass through Jaji country where it is pierced by the river Kurram. It, then, trends south and extends with to the south of 33°N latitude. It dissipates into low, barren ridges near Sibi at the southern end of Bolan pass. Its highest parts are undoubtedly near its commencement. The Sulaiman range forms an important watershed between the Helmand and the Indus rivers (see Map No. 2).

Khwaja Amran range commences at the northern extremity of the Kelat plateau and extends northeast towards the Chilzai country. It separates Shorawak from Pishin and then "...forms the northern boundary of Pisheen, and afterwards takes the name

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13 For details on the nature of watersheds, see Hayden, n. 9.
Tobn, from a country through which it runs". Another range trend eastwards to separate Pishin from Shaul. The southern boundary of Afghanistan is marked by the mountains range commencing from 29°N latitude (in Seistan).

Westwards, the Koh-i-Baba trends on a eastwest axis. It has an average elevation of 4500 m. above sea-level. The steep slopes, deep narrow valleys and greater width of the mountain ranges have rendered communication difficult. After traversing approximately 150 kms. the Koh-i-Baba bifurcates into two - a northern and a southern spur.

The northern spur extends northwestwards to bifurcate into the southern Safedkoh due west towards the Hurghab and Band-i-Turkestan which surrounds the basin of the Hurghab. The southern spur of the Koh-i-Baba is the Siahkoh which projects southwestwards. It changes its trend and marks the separation of Hari Rud valley from the Helmand valley. An important southeastern offshoot of the Siahkoh forces the Helmand river to adopt a southern course up to Girishk. The western continuation of Siahkoh, as the Doshak range, forms an important watershed between central Asia and southern Afghanistan. The entire country traversed is characterized by dry barren elevated plateaus and extremely rugged terrain.

The Koh-i-Baba later gives way to the Pamamisus mountains, which trend a southeast northwest course. The average

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elevation is approximately 3500 m. above sea-level. It is characterized by rugged and barren terrain. With steep slopes and narrow valleys form the northern flank of the Hari Rud valley, it dissipates into low ridges and hills and extends into northern Iran.

The pattern of mountain distribution, then, suggests its latent influence upon the activity of the inhabitants of the landlocked state. They had not only formed one of the factors obstructing the effectiveness of administration but also retarded the overall development of the state. They formed difficult barriers of communication as well as assigned individual characteristics to the different social groups with distinct economic basis for livelihood. This, later, induced loose political cohesion as a group among the inhabitants of the state.

Though the river basins occupy extensive areas, it is only along the foothills and river valleys where most of the human activity is carried out. This is largely due to the fact that greater proportion of the river basins lie in dry and arid areas which are unsuitable for human habitation.

The Oxus river basin is separated from rest of the basins by the central mountain system. It extends from Wakhan (sub-district of Badakhshan) in the east to the upper reaches of the Purghab in the west. Delimited in the north by the river, the basin is flanked by the central mountains in the south. The basin displays varied relief ranging from the
rugged mountains terrain of Balkh and Badakhshan which are characterized by lofty mountain ranges interspersed with deep narrow valleys to marshy lands north of Balkh, and Mazar-i-Sharif (Balkh and Mazar-i-Sharif are of strategic importance). This importance stems out from the fact that they dominate all communication routes from Badakhshan and Kabul as well as those leading southwards from the ferries and crossovers of the Oxus at Khiching and Anchkishoi; and from the alluvial plains along the banks of Oxus river through the sandy wastes of middle part of the basin to the "Chol" in the northwest.

"Chol" feature of the basin is the absence of major tributaries in the middle course. The important tributaries are the Elungh and the Surkusu rivers. All other rivers, such as Delpshab, Anchkishoi and Kaiman disappear in the sands of Oxus plain. All the streams afford good and easy highway after leaving the mountains. Eastwards of the approaches of western Afghan Turkestan, the communication lines are absent, only to reappear in the eastern parts of Balkh.

The Kabul river basin includes the basins of Alishang, Panjshir and Panar rivers of the left bank, and of the Logar, Nuram, Shari and Wali of the right bank. The basin is

15 "Chol" are "...a vast procession of low hills let out by drainage actions of ages from loess formation which composed partly of such from debris from the mountains and partly of blown sand from the great northwestern deserts of Turkestan, form a rude ramp...from sand-i-Turkestan mountains...into the Oxus plains...."

(footnote contd.)
limited in the north by the high snowy ranges of the Hindu-Kush and by the Safed Koh in the south; by the Sanglah range and Koh-i-Baba in the west; but towards the east, the basin extends into Pakistan.

The characteristic features of the basin are the numerous mountains and the valleys. The valleys are separated from each other by distinct mountain ranges. The terraces are separated from each other by bluffs which rise one to three metres above the general elevation. The valleys of the left bank region of the basin, especially that of Logar river, are separated from each other by defiles. The defiles further separate the successions of small and narrow basins.

The Kabul river basin is "...from the political geography point of view, the most significant region of Afghanistan..." The Kabul river valley, by far is the most important line of direct trade route from Peshawar. The main line of communication between Kabul and Peshawar is about 272 km. in length. The Kabul river valley is traversed by this route only for a distance of about 80 km. and at no given place it comes into direct contact with the river. This is best explained by the terrain over which the river flows. The Kabul route especially in the Mohamand country traverses through the


series of rugged and impassable defiles. From Lund Kotal down the pass to Dakka, the relief is even and thus to Jalalabad where the communication route scrapes through the plains at the foot of the northern slopes of Safed Koh.

Unlike the passes located in the extreme north and in the southern parts, the Khyber group of passes afford easy communication. The importance of this group of passes is that they not only formed the primary line of approach to the northwest frontier of the Indian subcontinent in the colonial era, but also was essential transit route for the landlocked state.

The Kurram pass is separated from the Khyber pass by the Safed Koh range and its offshoots. Between Peshawar and Kohat there is an extension of the full formation eastward towards the Indus. Round the source of this extension the frontier line was drawn in parallel to other frontiers, i.e., at the base of hills and the farthest limit of cultivable soil.

The Tochi valley is also one of the important and possible transit routes. But it has a gradual slope towards the rugged mountain ridges and intervenes between the cultivated tracts of Sherania and the undulating plateau which lies eastwards and southwards of Ghazni; thereby limiting the accessibility to the east-central Afghanistan.

The Seistan basin is in the extreme southwest. Seistan's northern rim is made up by the Hindukush ranges. "...the Helmand basin as a whole (defined in terms of total catchment) covers 350,000 square kilometres, little more than one-tenth is
Iranian". It consists of series of Hamuns (where the two major rivers Helmand system and Farah Rud discharge their waters), lake terraces and benches. The Afghan Seistan with relatively higher degree of slopes has very few areas of permanent water. The major fault which defines the western margin of the Helmand river runs from north to south, which indicated the correlation of the fault with the farthest east of Asia. It is enclosed at marked angles towards the foothills of the left zones. The main feeder stream is the Helmand (Hirmand) river which divides it into two major and several distributaries at the Irano (Persia)-Afghanistan boundary.

The Seistan lakes are conditioned by the surrounding of the country. Their extent is determined by the rate of evaporation and source of replenishment through the Shala Rud into Gaud-i-Zirreh. There are thus three permanent watersheds in Seistan. They are Hamun-i-Helmand (Hirmand) which is completely in Iran and finally Hamun-i-Puzara which is partially in Afghanistan.

It is dominated by clay and salt flats. Due to open character of the country, loess deposits have accumulated in southeast and eastern flanks of the Hamuns. The sand dunes have also formed a steep scarp along the Helmand river. The migratory sand dunes have frequently blocked the main channels of the rivers draining into the basins and have caused them to

change their course. The valleys of the Helmand basin are deep and flat, and have gravelly beds. Below Girishk, the river Helmand receives its largest tributary, the Arghandab (the tributary itself has three important tributaries of Arghastan, Tarnak and Dari rivers). The Helmand valley, particularly is a long, narrow stretch of green belt, imbedded amidst large alluvial desert. Stony desert is a prominent feature between the valleys of the Helmand and Arghandab. In Farah basin, however, the valley is restricted by the gravel ridges which run almost parallel to the river. Alluvial fans, salty deserts, sandy and gravel covered flats and gravelly terrains cover much of the basin. The division between the various physical attributes are rather sharp in the basin as compared to the Helmand basin.

The Hari Rud basin is delimited in the north by the Paropamisus mountains and Karakum desert, by the Siah Koh in the south; by the Band-i-Turkestan and Koh-i-Baba in the northeast and east. In the west, it is bordered by the desert steppe and extends into Iran. In its middle course, Hari Rud forms the boundary between Afghanistan and Iran. The physical feature of the basin is dominated by the valley. It is an extremely fertile area made up of alluvial and outwash plain. The valleys are deeply mixed and are broader in the cast. The high watershed ridges and their offshoots divide the entire valley into several small ones. The dry steppe surrounding the Hari Rud valley is mainly made up of sand playa and gravel
deposits. The Khwagar and Korruk rivers are important tributaries of the Hari Rud.

The unproductive wastelands of southern and western Afghanistan occupy nearly one-third of the total area of the country. The physical relief of the region is predominantly dry, barren and elevated plateaus in the east and south, which often exceed 1000 m. above sea-level; to sand and stony deserts often falling below 700 m. above sea level. In the south, Dasht-i-Margo on the right bank and Registan on the left bank of the Helmand river are prominent features. Migratory dunes are characteristic of the Registan desert.

The plateaus in the western Afghanistan, consist of open undulating plains of sandy and gravel covered flats. These are interspersed by short ridges and isolated peaks. The entire area is located in a depression between the Iranian and Afghanistan boundary. The marked feature of the relief which negates the grouping of plateaus or uplands is their individual separation by topographical expense of differing width and lower but varied altitude. The intervening areas are plain in only that sense for, though most have a flat surface some are open and others are basin-like.

Physical relief has played an important role in shaping the nature of state activities of Afghanistan. With persistent regularity, it had influenced the course of Afghanistan history as it has emerged as a single-most factor in hampering
the modernization programmes of the modern Afghan state. With its varied influences, it had affected the historical, political and economic development of the state. This resulted in the emergence of distinct but separate regions within the Afghan state. It has further created acute regional imbalances and emergence of core areas which determined the political affiliation and relationships of the different regions between each other.

Almost all aspects of life in Afghanistan are affected or even dominated by the climatic conditions. Although it varies with location and elevation, it is mostly dry throughout the country. Its continental location deprives it from moderating effects produced by large water bodies. Its extreme cold and oppressive heat has left a deep impact upon agriculture, industrial and commercial activities and the character of the inhabitants. Along with relief, it has posed itself as the barrier of communications and retarded the development of the state.

The climate of Afghanistan is characterized by extreme variability of conditions, both seasonally and spatially. It

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18 Lack of data and source materials have, however, impeded a detailed analysis of the impact of geographical environment on political and economic actions of the state. An attempt has been made to select from the mass of information and observation and are presented in a manner to indicate the physical influence upon the state.
has the dryness of the air, low cloudiness, plenty of sunshine, low precipitation, hot summers and relatively cold winters, resulting into a continental type of climate with a sharp fluctuation of both the diurnal and annual range of temperatures.

Though orography and topographic differentiations are important climatic factors, the air masses have sufficient impact on modifying the climate. In winter, the entire country comes under the Siberian high pressure belt. It also comes under the influence of the cyclonic depressions originating in the Atlantic Ocean and the Mediterranean Sea. With the development of low pressure in the south and southeast, the combined influences of these air masses bring relatively severe winters and heavy precipitation throughout the country. It is clearly evident from the fact that nearly 80 per cent of the total precipitation is found to be concentrated in winter and early spring period.

In summer, however, these conditions are reversed. The subtropical high pressure belt acts as a barrier to the Indian monsoons and the Persian Gulf air-masses. With the development of low pressure in the Oxus plains, the movement of these air masses are impeded by the central mountain system. As a result the precipitation is concentrated in the southeastern parts of the country.

Topographic differentiation suggests a variety of micro-climatic conditions. They bring about a wide spectrum of
temperature distribution across the whole country. Alpine conditions prevail throughout the upper reaches of the major river basins and the high mountains. The winters are very severe and last for eight to ten months. The summers are short with average air temperature rarely exceeding 5°C. Often negative temperatures prevail in these regions as in South Salang and Eastern Hindukush.

The variation of temperature is found not only between the major river basins but also within the basins itself (see Map No. 4). For example, the average mean temperature of Kabul basin in January is 4.2°C and 24.6°C in July whereas in Hari Rud basin it is 7.1°C in January and 24.6°C in July. Again within the Kabul basin, the average mean temperature of areas above 4000 m. is 0°C in July in comparison with 4.6°C in January and 33.6°C in July at Jalalabad and 3.7°C in January and 24.3°C in July at Kabul. In Farah region, especially the lower parts, are places of highest temperature in Afghanistan, where the average monthly temperature during the summer months 30°C; and maximum air temperature in the winter months hardly falls below 7°C. The northern plains experience cold winter and hot summers, which is due to their own character and the direct influence of cold air masses from the north.

In dealing with the climate of Afghanistan, the lack of long-term meteorological data is a major handicap. The climatic classifications that have been done was "with some
assurance from principles and from analogous stations in the USSR, Iran and West Pakistan...." Any exposition on the climate of Afghanistan had to consider the "...mountainous topography...with deeply cut valleys and relatively high watershed ridges,...(which)...create a variety of climate the different parts...."

The apparent lack of long-term meteorological data did not inhibit the various climate classification of Afghanistan. Elevation and meteorological data of the station in the peripheral regions of the neighbouring countries were taken as basis of the classification. However, Arez in 1969, was

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19 A.A. Michel, "On Writing the Geography of Strange Land and Faraway Places: Afghanistan, for example", Economic Geography (Horester), vol. 36, 1962, p. 359.


equipped with larger details of meteorological data and suggested a classification based on precipitation and potential evapotranspiration indices. But keeping in view the physical and climatic characteristics of Afghanistan, the potential water needs, heat and moisture indices, all suggest a modification of Arez's classification of Afghan climate. Though the modification is based on inadequate data, it attempts to indicate the predominant influences exerted by regional topographic conditions and the degree of pronounced summer dryness upon the classification. The climatic classification then would be: 1) the desert climate of the southwest and extreme northern Afghanistan, Bwhs; 2) the monsoonal climate of Pakhtlia, (i) cw and (ii) caf; 3) the Mediterranean climate of Kargahar, Ca; 4) the subtropical steppe climate of Jalalabad, Bshs; 5) steppe climate of north and south side of Hindukush, Bsh; 6) the Alpine climate of the central highlands, and north and northeast Badakhshan, Df; 7) Highland climate of eastern Hindukush, E; and 8) Tundra climate of Wakhan, Ft (see Map).

The Impact of Geographical Environment

Influence of geographic environment, has been persistently felt in the Afghan history. It had remained as a physical basis of its evolution as a state. The spirit of political
freedom and independence among the various Afghan tribes or their periodic defections, are all probable effects of the geographical remoteness. The locational proximity had also helped in shaping its history. The weakening of central authority and the necessity of aggressive forward policies to maintain internal political stability, as a consequence, remained a recurrent theme of the Afghan history.

The physical environmental conditions have more or less determined all the major aspects of the Afghan society and the nation state. The local regional variations of these elements have not only influenced the level of man-land relationships but also has influenced the separate regional, political and social development. As a result of divergent but distinct regional interests, the attempts made on political and economic unification as well as the establishment of stable political system has been often obstructed.

The Hindukush and its westward extension served to divide the westward migrating central Asian tribes into two streams; diverting one westward to Herat and Iran and the other southward to the Indian subcontinent through the seasonally open passes of the Hindukush. It served as much to unite as to divide Central Asia from the Indian subcontinent. Yet "...the story of Hindukush...neither of peripheral remoteness nor of the disconnected comings and goings of people and ideas merely...the wild mountains that are the backbone of Afghanistan not only divided Central and Southern Asia, the
Oxus and the Indus but also always interconnected the two parts of Asia into a system of interrelations...." Hindukush was a barrier as well as a carrier of currents and of uniting the historical processes of the Asiatic heartland with the Indian subcontinent.

The mountain systems have tended to prevent any sort of cultural exchanges between the various diverse social groups inhabiting Afghanistan. As territories of each social group was physiographically limited from others, the social groups developed their own traditional political conception and organization on the basis of modifying influences of the physical environment they inhabited. Similarly in the lower order of the hierarchy of social groups, tribes and sub-tribes were separated from one another and established a general framework of relationship within themselves as well as with other social groups. The pattern of relationship which emerged was as follows (see Map No. 5 and Appendix II):

<table>
<thead>
<tr>
<th>Social groups</th>
<th>State area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major tribal groups</td>
<td>Major geographical region</td>
</tr>
<tr>
<td>Sub-tribes</td>
<td>Primary sub-divisions or provinces</td>
</tr>
</tbody>
</table>

24 J.P. Singh Uberoi, "Between Oxus and Indus: A Local History of the Frontier, 500 BC to 1925 AD", Indian Horizon (New Delhi), vol. XXII, no. 1, January 1973, p. 81.

Clans
Extended families
Families
Local areas or districts
Sub-districts
Villages

However, the unequal physical division between northern and southern Afghanistan enabled the geopolitical interrelationship to have far-reaching impact upon Afghanistan. The influence of natural environment upon the boundaries of Afghanistan was also evident. Although it shows certain degree of similarity and coincidence with the physical landscape, the boundaries have largely overlooked and have divided the geographical unity of the state. The variation between the demarcated and the geographical boundary, was also partially clear and was suggestive of the greater or lesser completeness of the physical barrier between the various ethnic groups, who were collectively (within Afghanistan) were known as Afghans. The effectiveness of the physical barrier were evident from the areas which were separated by people whose difference with one another was as prominent and identical to that between the demarcated and geographical boundary. Due to the spatial physical pattern and the distribution of social groups, the concentration and diffusion of power in the divided areas had decisive influence in the unity and stability of the state. It also enabled the emergence of regional core areas as rival political centres.

The prevalence of semi-arid conditions enabled the northern half of the country to weave its own distinct
geopolitical relationships. The social and economic landscape was markedly influenced by the availability of water for irrigation. This became a crucial factor for the power equation in the region. The struggle for irrigation channels was the struggle for power and was concentrated in the cities, particularly in northern Afghanistan. The relationship of these cities of the Oxus plain with rest of the country was tenuous and weak; it was influenced and often dominated by forces of trans-Oxus region. This peripheral influence upon the region was ultimately broken in the late nineteenth century, when the regional nuclear area of Balkh was transferred to Mazar-i-Sharif and was effectively incorporated in the state.

Southern Afghanistan was divided into eastern and western halves which was both physical as well as economic and political division (see Map No. 3). Although the region is predominantly inhabited by Pashtun tribes (unlike the northern half), the geographical elements contrived to equate the power balance between the major nuclear areas of Herat, Kandahar and Kabul. The confrontation between the nuclear areas in the region is evident from the compromise location of the capital of the Afghan empire (in eighteenth century) at Kandahar, a Durrani area. The subsequent transfer of the capital of the

27 Ibid., p. 82.
empire to Kabul not only suggested an effort to break from the regional influence on the empire but also indicated the minimization of the impact of external forces by bringing the state into effective political unity:

The position of Kabul in the geography of Afghanistan assures its continuance as a great centre of trade while quite as much as it defines a point of strategic value; so that of all the many routes which cross our frontier and lead from High Asia to the plains of Indian subcontinent that which connects Kabul with the ancient Afghan city of Peshawar...is by far the most important. (28)

However, the importance of Kabul was to bring serious repercussions to the Afghan state. Though it was able to establish a framework of political unification of the different regions of the state, it was undermined by the external forces. Therefore, the fluctuations of political climate in Kabul not only enabled the regional core areas to separate but also enabled the external forces to separate the Pashtun territories. This latter aspect accentuated the disruptive forces within the state.

Nevertheless, these forces are vigorously counteracted by rapid political modernization and economic development of the state. Though, the development of transportation and communication, intensive agricultural and irrigation, industrial and mineral resource exploitation, has been able to unite the state, it has created acute regional imbalances within the

28 T.H. Holdich, India (London, 1904), p. 73.
state. The influence of geographical environment coupled with the landlocked location—continued to perpetuate the conflict between the traditional and modern forces of social change (as in 1929).

It is evident that in its efforts to develop, Afghanistan had expressed itself to foreign political pressures. The foreign economic assistance was formulated by aid-givers and was contrary to the need and geographical environment of the state. One such example is the Helmand river valley project, whose failure to bring required results became the biggest political issue in Afghanistan. Therefore, the type of economic development through foreign assistance, tended to alienate the different regions and the inhabitants from one another.

The geographical factors have played a significant role in shaping the national character and political outlook of Afghanistan. It inherited a harsh terrain and austere climate as well as the consequences arising from the crossroad location in Central Asia. These influences were impressed on the Afghan society and was expressed in the form of survival and strong sense of independence among the tribes within the overall pattern of ethnic and culturally heterogeneous population. The environmental factors remain to hamper the Afghan attempts to build a strong political system and viable economic state.

29 Myrdal and Kessle, n. 26, pp. 159-60; also see pp. 208-9 and 235-7.
Yet, it is undoubtedly clear that if the physical relief was more favourable, the basis of the required coherence and self-expression of the Afghan nations would have definitely exploited the advantages of location and "...there can be no question that Afghanistan would have had a different history in this respect, if there had been any connexion between Kabul and Hari Rud valleys...." Therefore, conditioned by location and relief "...an axial line of crest with its flanks facing two large units between which the minor one is a buffer...." was presented by the Hindukush between Russia and England in Central Asia. Under these circumstances, the political geography of Afghanistan becomes even more important, when, once the land-people relationship is evident and established.


31 Ibid., p. 342.