ECONOMY AND SOCIETY IN PAKISTAN:

Traditional Systems and the Impact of Change

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1966
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The research that provides the material for this dissertation was undertaken during the tenure of a Commonwealth Scholarship awarded by the Government of Pakistan.

The intention was to investigate the agricultural economy of the northern mountainous areas of West Pakistan, in order to discover why the sufficiency of grain production varies between districts. The findings were intended to have practical value. Extensive field-work was necessary because there are very few published data concerning the economy and agriculture of the northern areas. Accordingly in 1962, reconnaissance visits were made to several districts: altogether about 1,000 miles were travelled, nearly all on foot; data were collected from 34 villages and from 12 individual cultivators; and qualitative and general information was obtained from a large number of informants. (See appendix 1, p. 272, and map 9 opp. p. 272.) Fields, crops, fruit-trees etc. and agricultural practices were observed and, while travelling between villages, detours were made to areas at higher altitudes to study livestock-farming, to observe distributions of pasture and timber, and to observe sources and methods of obtaining irrigation water.

Up until the end of that year the project and the programme of field-work had been approved by the Government of Pakistan, but in 1964 there were difficulties over visiting the northern areas, and it was suggested that the project should be modified to exclude the necessity for further field-work. This was eventually and reluctantly agreed to, and it was decided to make the project wider in scope. Although less satisfactory than the more quantitative approach originally conceived, this was felt to be appropriate in view of the scarcity of basic qualitative information about the northern areas, whose agriculture and economy have not hitherto been studied as a whole. The widened scope allows fuller use to be made of the limited published material. Nonetheless the study could not have been made in its new form without further visits to collect more qualitative information.
both for the wider approach now adopted and to supplement any complete
the material collected previously. Further but very short visits for
field-work were permitted in the autumn of 1974.

The project is thus a broad study of the organization of agriculture
and of economic activities within a large part of the northern mountain-
ous areas, with particular reference first, to traditional variation
between the populations of territorial units, and secondly, to the ways
in which this variation is now affecting efficiency of food production
and in resulting in differing responses to new economic opportuni-

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encouraged in the idea of undertaking research by Mr. W.J. Macpherson of
Gonville and Caius College, Cambridge, and wish to record my appreciation.

The study would not have been possible without the willing and
cheerful help of interpreters, farmers and other informants in the
districts visited. Any investigator who works in the northern areas
must be impressed and delighted by the scholarly interest that the
educated people there take in their history and culture. Their
generous and painstaking efforts to provide accurate information and
objective assessments have greatly facilitated the study.

Presentation and Names

Specific statements concerning the northern areas and the region
studied, for which an authority is not cited, are based upon field-work.
Field-work data refer to 1972-74 unless otherwise stated. In view of
the inevitable qualitative nature of many of the data, supporting
statements in the literature have been referred to, usually with the
invitation 'See also'. Where books and papers are first cited, the
details are given in full; thereafter reference is made to the author (or,
for official reports, to a short title) and the year of publication only.
Islamic names that are given in full in the original are not given in this dissertation, in the order that the author himself uses. British and German authors are referred to by their surnames only. All books, papers and reports that have been cited are listed in the bibliography. The abbreviations used for the titles of certain periodicals are given in the bibliography. Most of the names of places and of groups of people that are used are standardized in transcription, but some have been transcribed for this dissertation either because they do not appear in the literature or on topographical maps, or because they appear to have been wrongly transcribed in the past. So consistently correct source of transcribed names has been found. All discritical marks have been omitted. The locations of valleys, districts, villages etc. will be found on the appropriate maps.

The unit of weight used is the maund, which is 32 lb. The unit of currency is the rupee, which formerly consisted of 16 annas, and is now divided decimally.
CHAPTER 1. INTRODUCTION : PAKISTAN

I. Pakistan and the Region Studied
II. Previous Studies and Reports

Pakistan and the Region Studied

The region that is the subject of this dissertation is situated in the most northern part of West Pakistan. It is slightly more than 300 miles from east to west, 100 miles from north to south, and lies within the rectangle defined by latitudes 35° and 37° N and longitudes 71° and 73° E. (See map 1, opposite.) It comprises seven-eighths of the area commonly known as Pakistant.

The word 'Pari' and variations of it have been used since ancient times by writers in Sanscrit, Greek and Latin. They applied the name generally to the inhabitants of the mountains to the north, north-west and north-east of the Vale of Kashmir. The name 'Pakistant' appears to have been first used by Leitner, a philologist and one of the first of modern writers to visit the region. For him it was a convenient general name for "... all the countries lying between the Hindukush and Khyber, etc.," i.e., "... for the countries between Kabul, Kashmir and Badakhshan..." He included among the inhabitants of Pakistant "... not only the Chilaisa, Aharis, Ghilzhis, Durelys, etc., but also the people of Rana, Nagyr, Chitral and Kaffiristan." While recognizing that this usage incorporated a heterogeneity of peoples, he pointed out that they "... offer certain analogies, and ... may have had a certain history in common..." The same usage was

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1 William Moorcroft and George Irebeck, Travels in the Himalayan Provinces of Hindustan, etc., London, 1841, p. 256ff. (For the full title, see bibliography.)
2 G.N. Leitner, The Languages and Races of Pakistant, Lahore, 1870, p. 45.
3 Leitner, 1870, p. 3.
4 Leitner, 1870, p. 45.
5 Leitner, 1870, p. 8.
followed by areas, the list of which included all but one of the geographical divisions and communities that are included in the present study, together with some others immediately to the south that could not be included. Another 19th century writer, Riddell, remarked on the heterogeneity of the inhabitants of Sardistan, ...

... a tract of country inhabited by several races, speaking distinct languages, who differ considerably amongst themselves.

No too concluded that

As, however, there is no one name which will properly apply to the people and countries in question, it will be perhaps convenient to retain the names of Sard and Sardistan when speaking collectively of the tribes in question and the countries they inhabit.

Subsequently, when the area had been surveyed and was better known, the extent of Sardistan was defined exactly:

Sardistan comprises the whole of Chimal, Jasus, Kunsal, the Gilgit valley, Hunza and Nagar, the Astor valley, the Indus valley from Ranji to Astara, the Kohistan-i-

subsequent attempts to give any greater degree of precision to the noncolours have led to difficulties. Philologists have applied the term 'Sardio' to a group of Indo-Aryan languages spoken not only in Sardistan, but also in some adjacent areas. Such a 'technical' usage not only embraces Kashmir, but it excludes the languages spoken by the inhabitants of certain northern valleys in Sardistan, whose affinities are thought to be with one of the major elements in the adjacent population of the speakers of Shina, a 'Sardio' language.

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7 J. Riddell, Tribes of the Hindoo Kooch, Calcutta, 1850, pp.3-9.
9 Criticism, 1919, p.4, although he cites approvingly the earlier writers' use of 'Sardistan'.
Conversely, there are various elements speaking what are no affinities. Physical anthropologists, who have used the term *Hindu* "... in an ethnic sense as applying to all the people speaking *Hindu* languages ..." 10, find that their own data suggests that there can be a smaller degree of ethnic relationship between groups speaking different *Hindu* languages than between *Hindu* and non-*Hindu*. 11 There seems then to be little justification by ethnic criteria for classing together all the speakers of the languages which have been defined as *Hindu*; and the use of the term *Hindu* in this philological sense appears to be incapable of useful extension into other fields of study.

Both in general, and for the purpose of the present study, it is more satisfactory to retain the original conception of *Haidaristan* and *Hindu* as convenient general names for a territory and its inhabitants that can be defined by a reference to a number of characteristics, and for which there are otherwise no comprehensive designations. In this sense, *Haidaristan* has been used by several recent writers. 12

The northern and southern limits of *Haidaristan* may be defined by reference to its physical characteristics. It is exceedingly mountainous, containing a part of one of the world's greatest mountain systems and several of the world's highest peaks. Much of the surface is covered by permanent snow and ice. The mountains

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10 G.J.M. Aitken, "A Contribution to the Physical Anthropology of the Great *Hindu* Unnao Valleys" etc., Journal of the Royal Anthropological Institute, LXXI, (1934), p.19, (for full title, see bibliography). As he himself remarked that "it is doubtful whether its use in a racial sense is justified ...".

11 See e.g. C.J. Raba, "Social Affinities of the Peoples of India", Genesis of India 1931, i, Part II (anthropological), p.31 and passing to Morant, 1936, p.49.

are deeply intersected by valleys, in which irrigation is necessary for cultivation. On these grounds, Sardistan can be distinguished from the pamirs to the north and the foothills to the south. The northern boundary is further and conveniently defined by the international frontier of Pakistan, which largely coincides with the major water-parting of the drainage basins of Central Asia and of the Indus. To the southeast, the water-shed between the Indus and the Kishanganga and Kaghan valleys marks the southern limit of aridity and of the necessity for irrigation. To the southwest, there is no prominent physical feature to mark the boundary of Sardistan, but the transition in the nature of the relief and the southern limit of the necessity to irrigate coincide with the cultural boundary—in this direction between Saraus and the Pathan populations of Dir and Swat.

The limits of Sardistan in most directions can be defined by reference to the characteristics of its inhabitants, although heterogeneous in respect of language and ethnic relationships, share a common culture and history, claim identity with each other, and differentiate themselves collectively from the peoples of adjacent regions.

13 "Correctly described, a Pamir ... is ... neither a plain nor a down nor a steppe nor a plateau, but a mountain valley ... differing only from the adjacent or other mountain valleys in its superior altitude, and in the greater degree to which its trough ... has ... approximated in appearance to a plain ..." George E. Curzon, The Pamirs and the Source of the Oxus, London, 1893, p.17. "The word means an upland grazing ground." Reginald Schomberg, "The Yarkand Valley of Upper Chitral", Scottish Geographical Magazine, i, No. 17, (July 1934), p.210. "The abrupt change in topography and climate between Sardistan and the Pamirs is described by A.W. Tilman, Two Mountains and a River: Cambridge, 1949, p.123. A small number of Pamirs at the head of the Chitral valley have been included in the region studied, although by topography, climate, vegetation and human geography they do not form part of Sardistan. This area is known as Saroghil, and is illustrate by photographs 20, 21, opp. pp.175. See map 2 opp. p. 5.

14 There are small isolated settlements of Saraus at Charais at the head of the Kishanganga valley, in the nearest area, and in Ladah and Baltistan, but they fall outside Sardistan as considered here.
This diversity within unity is also characteristic of the relationships between the populations and their environment. Scattered settlements in the valley bottoms, where irrigated cultivation is combined with livestock husbandry, are common throughout, and agriculture techniques and practices differ only in the degree to which they are applied and utilized.

To some extent these features, both physical and human, apply to the neighbouring regions to the west and east, namely Kuristan and Balistan. For comparative purposes it might have been appropriate to have included Balistan in the present study, but practical considerations and lack of opportunity for field-work prevented this. For similar reasons concerning practicability and opportunity for field-work, it was not possible to include all the small communities inhabiting the most southerly valleys of Kuristan. The relationship between the whole of Kuristan and the part of it which is included in the present study is shown in Map 2 (opposite). The population of the region studied is about 300,000, while the total population of those southern valleys which could not be included may be a further 50,000.

Leitner originally included Kafristan, (as Kuristan was then known,) in his conception of Burdistan, but it was omitted by Iraw and Kurandi, and since it passed into the Afghan sphere of influence at the end of the 19th century, and has remained a part of Afghanistan, it may be conveniently excluded from Kuristan. Kuristan is therefore exclusively Pakistan territory. 'Kuristan' is itself a convenient and general designation for an area inhabited by a heterogeneity of peoples and language groups, and its scope and implications are similar to those of the term 'Burdistan'.
Although some information about Kardistan and its inhabitants is available from early sources, the modern commentary upon events there begins with the middle of the 19th century. This was the time when the British-Indian empire, by its expansion north and west, and the Russian empire, by its annexation of the states of Central Asia, seemed set for collision. It was against this background of territorial and political rivalry during the second half of the century that travellers and officials visited and worked in Kardistan, and wrote about it. Much of the material of this period is therefore concerned primarily with strategic, military and political affairs, and much of it is concerned with those parts of Kardistan which, in imperial thinking, were nearest to 'the natural boundary of India', i.e. those northern valleys which extend up to the watershed of the Indus drainage basin. Even before the extension of British-India's influence to the Punjab, one or two non-official travellers had reached the borders of Kardistan. After 1847, when the first Government representatives reached Gilgit, and especially from 1860, there was an increasing number of missions, agents, embassies and expeditions to various parts of Kardistan, both for political and diplomatic purposes, and for surveying and exploration.

15 The imperial background, and the political and military events of the second part of the 19th century, during which period much of Kardistan came under the aegis of British India, are described fully by Alder, 1963.


18 Vans Agnew and Young. Their report was never published, (see Kidd, p. 3 and n.), but Vans Agnew's political diary of his journey to Gilgit is included in the political diaries of the Resident at Lahore and his Assistants, 1846–1849, Lahore, 1919, VI, pp. 297–302.

The few individuals who spent a considerable period of time in
the region, or who were trained observers, have left invaluable
accounts of contemporary conditions and economic activity. 20

At the end of the century, some parts of Kardistan became more
closely connected with British-India, (i.e. Gilgit, Astore and the
other components of the Gilgit Agency). From that time, but only
for these districts, there are intermittent and miscellaneous
official publications, a few of which have some statistical data
concerning local populations, a few of which, indirectly, provide
some limited information about agriculture and economic activity. 21
The most comprehensive quantitative sources for these districts are
the decennial population census reports, but these, like other
occasional quantitative data, are sometimes unreliable and their
data is often non-comparable in detail, especially for the early
decades of the century. 22 For the parts of Kardistan which remained

20 E.g. Brow, a geologist in the Kashmir state service, whose book,
The Jammu and Kashmir Territories, 1975, combines careful
observation and enquiry with a cautious assessment of his data.
The first government political officer to be stationed in
Kardistan was Sidulph, whose Tribes of the Jumho, 1900, is
the first comprehensive description of Kardistan and its
inhabitants and is a major source for the traditional political,
social and economic organization of the region. A third
authority for this period is Robertson, who "... was among the
first men of modern times to visit a primitive society with the
expression purpose of studying it." Adam Curle, "Sir George
Robertson: An Early Field Worker", Econ. LX, Article 5, (Jan. 1961)
p.133. Much of Robertson's material is contained in his book:

21 E.g. Frontier and Overseas Expeditions from India, (Intelligence
Branch), Simla, 1907, I, pp.1-30; Shankar Singh, Assessment

22 Enumerated figures were not always distinguished from estimated
figures, and the administrative units among which the population
was distributed were changed between one census and the next, but
were seldom defined territorially. (e.g. e.g., Census of India 1911,
X, "Kashmir", Part II (Tables), p.220; Census of India 1921, XIII,
largely autonomous between 1900 and 1947, (i.e. Chitral, Kohistan and parts of Shina), official publications are fewer, and quantitative economic and agricultural data almost entirely absent.

The most valuable contribution to the literature during this period up to 1947 comes from the writings of a number of scientists who worked in Pashistan, and among whom were philologists, archaeologists and ethnologists. Their published work does not only concern their particular fields of study, but includes observations and detailed descriptions of the organization of the region's populations, of the distribution and utilization of resources, and of agriculture, trade and other aspects of local economies. For several parts of Pashistan, these authors remain the most reliable and comprehensive authorities, both for traditional and, to a large extent, for contemporary conditions.

(continued)

"Kashmir", Part II (Tables), p.232, Census of India 1941, XXI, "Jammu and Kashmir" Part III (Village Tables and Housing Statistics by R.J. Wrold), pp.532-3. Nor was it made clear whether temporarily-resident but foreign army garrisons were present and, if so, what their numerical strengths were. In the 1911 census report, it was stated that much of the census administration in the Gilgit Agency was unsatisfactory, both at that time and at the previous census. See Census of India 1921, XXI, "Kashmir", Part I (Report by H.G. Addis-Zaman Khan), p.62. In subsequent decades rates of growth are so erratic, and so variable between districts, as to cast doubt upon the reliability of the figures, (see table 4, opp. p.84, while occupational data, such as that published in the 1931 report is unusable in the present study. See Census of India 1931, Volume XVIII, "Jammu and Kashmir State", Part II (Tables), pp.34-167.

Since 1947, there has been a widening of official activity, e.g., to include population censuses of every part of the region, but at the same time, there has been increasing restriction upon the publication of this material, much of which is now regarded as secret. This has applied largely to those parts for which data was formerly available, so that there is no part of the region for which there is a continuous published official record. Nor, for any part of the region, are there any published sources for current trends such as population pressure, agricultural output and non-agricultural activities, nor to government activities such as public works, the provision of services, the import of grain and the recruitment of employees.

This dearth of official and quantitative material is made up for, to some extent, by further studies and publications by scientists and investigators. Some of their work has been concerned with aspects of agriculture and economic organization, while some has been primarily ethnological. This recent work, especially that which concerns the north of Pakistan, has contributed greatly to an understanding, both of the varying ways in which populations are utilizing their resources, and of the political and social diversity which may be associated with these.

For official maps on a scale of 1:250,000 which were formerly available for most parts of the region are also now classified as secret, and are no longer published.

I Relief and Elevation
II Physiographic Features Pertinent to Irrigation
III Drainage
IV Climate
V Vegetation
VI Non-Agricultural Resources
VII Water-Resources and Irrigation
VIII Physical Difficulties of Travel

Relief and Drainage

Pakistan contains elements of three mountain ranges, the "Himalayas, the Karakoram, and the Hindu Kush. They are all tectonic parts of the great synclasis of the north-west of the Indic-Pakistan subcontinent, but it is nevertheless convenient to subdivide the system according to its relief. (See logg, p.11), since Pakistan is located at the synclasis itself; the orientation of the ranges in the eastern part differs from that in the west. The Karakoram and Himalayas lie approximately N.-S., and the Hindu Kush lies approximately E.-W.

The Himalaya is bounded to the west by the Indus river; its most significant feature of its western extremity is the peak range Garbat (26,600 ft.), which marks the south-eastern corner of Pakistan. From Range Garbat, the Himalayas extend south-eastwards; its greater part is beyond Pakistan and beyond the border of West Pakistan. The name Karakoram

... is now conventionally given to the whole mountain region between the lower Shyok and Indus rivers on the south and the Shishkam tributary of the Takamri river on the north. The region is bounded by the Lehoman and Karambar rivers on the west and by the upper Shyok on the east beyond the Karambar river on the west the mountains become known as the Hindu Kush...

The main crest of the Hindu Kush curves south-westwards from its termination at the Karambar river for some 500 miles.

... and then fans out into several outlier ranges of lower elevations. The western extremities of the
Hindu Kush cover most of Central Afghanistan.

... Tarich Mir and most of the other high peaks
are in the main Hindu Kush range, but there is another
range to the south, separated from the true Hindu Kush
by the Yarkand River (called, in various localities,
the Chitral or Khan river), which has come to be
known as the Hindu Raj. 3

The subsidiary ranges also follow the general trend of the systaxis.
The Hindu Raj, which lies N.E.-S.W., forms the eastern watershed of the
Chitral river; these northern and western watersheds is formed by the
main Hindu Kush crest. Near its southern end the Hindu Raj gives rise
to a northerly spur, which includes the Kuri Zun peaks, the highest of
which is 21,494'. These are bounded to the north by the Chitral river.
North of this, between the main river and its right bank tributary the
Yarkand river, is another water-divide with peaks of slightly lower
elevation. The Hindu Raj also gives rise to a long easterly ridge of
average elevation 14,000', which divides the Gilgit and Indus valleys,
and around the eastern end of which the Indus flows, dividing this out-
lying spur of the Hindu Kush from the Himalaya. Extending to the west
of Nanga Parbat is a parallel ridge which, for 60 miles, forms the
northern watershed of the Indus. To the south of this ridge are the
Nischangana and Zaghan valleys. Between the main crest of the Himalaya
in the Nanga Parbat region and the main crest of the eastern Karakoram
are a number of smaller ranges also lying N.E.-S.W. Those which lie
to the north of the Indus are included in the Karakorum. The western Karakorum contains many high peaks, e.g. Bisteghal Sar I (25,093'), Matoposh (25,550', see photograph 1 opposite), the Satura peaks (23,540' and 25,294'), and Haramosh (24,270').

These mountain masses are characterized by a very considerable range in altitude and climate, from the major rivers lying in their deeply-eroded arid valleys to the highest elevations, where snow and ice are permanent.

All the rivers of Dardistan eventually drain into the Indus, although the confluences of some are south of Dardistan itself. The Indus flows north-westward along the southern edge of the Karakorum to its confluence with the Gilgit river, where it turns south, and receives another important tributary on its left bank, the Astor river. At the foot of Bange Parbat, it turns westward again, receiving the smaller tributaries which drain the southern side of the Gilgit-Indus watershed, and those which drain the northern side of the Indus-Saghan ridge. The river then turns south, passes through the gorge section known as Indus Kohistan, receiving small tributaries on its right bank, and debouches into the southern plains.

The upper Gilgit river and its left bank tributaries the basin and Saranbar rivers drain the basin formed by the Hindu Raj and the easterly Gilgit-Indus watershed. To the east, nearer its confluence with the Indus, the Gilgit river receives a third major left bank tributary, the Hunza river, whose source is north of the main Karakorum crest and whose course, like that of the Saranbar, is across the N.W.-S.E. orientation of the eastern part of the syntaxis.

To the west, the Chitral river and its tributaries follow the N.W.-S.W. orientation, draining the basin between the main Hindu Kush and the Hindu Raj. To the south, the Panjikara and Swat rivers drain the smaller basins lying between the southern Hindu Raj and Indus Kohistan.
Physiographic Features permitting Cultivation

The inhabitable valleys of Pardistan vary in size and relief from the 100-mile and relatively gently-sloping Gilgit valley to the short steep valleys draining into the Indus west of Jangla Farbat. As a result of their steeper gradients, the shorter valleys are more steeply-cut, and there is consequently less land which is suitable for cultivation. (See photograph 3 opposite.) The floors of the main valleys vary in width, and in some localities may reach 1 mile (see photograph 2 opp. p. 12), while in others the river may pass through a V-section, as where the Hunza river breaks across the Karakoram crest-line. Here and in other places, the presence of gorges, which are especially characteristic of the lower reaches of many of the rivers in Pardistan, can perhaps be explained in terms of rejuvenation associated with the recent uplift of the mountains. The Indus, Swat, Panjkora and Chitral rivers all pass through deep and inaccessible gorges before debouching in the plains. Many of their tributaries likewise pass through narrow and precipitous sections before their confluence with the main rivers. Riddolph, in writing about the relief, commented upon this, and upon the resulting inaccessibility of the upper parts of many valleys:

In no other part of the world, probably, is there to be found such a large number of lofty mountains within so confined a space. This immense mass of mountain is intersected by numerous deep valleys, and these are generally narrower at their mouths than higher up. It is not unusual to see among these valleys of from 10 to 30 miles in length, supporting a population varying from 200 to 5,000 souls, with an embouchure so narrow that it is difficult to find a pathway beside the torrent which issues between overhanging rocks. In addition to this, the enormous rush of water during the summer months from numerous and extensive glaciers and snow-fields impedes communication.

Thus aided by nature in preserving their independence, and partially isolated from one another, the people of the country have formed themselves into a number of separate communities which have existed for generations within the same narrow limits. 4

4 Riddolph, 1880, pp. 1-2.
Because cultivation is limited to land which is flat or which can be terraced, the physiographic features which permit this are of importance. Flat or gently sloping land is often found only in the valley bottoms, and may be associated with two or three different land-forms. It may be part of a river terrace which has escaped downcutting; such terraces are often found at the mouth of tributary valleys or where there is a bend in the course of a main river. (See photograph 1 opp. p.12) Being composed of finer-grained sediments deposited by the main rivers, terraces often yield soils which are considered by local farmers to be good. The surface slopes of terraces are generally slight, and little or no terracing may be necessary. The second important land-form whose surface may be cultivated is the fan of detritus deposited by a tributary where it enters a larger valley. (See photograph 2 opp. p.12) Since fans may be formed by the deposition of coarser materials only, while the finer sediments may be carried away, so the soil of fans is sometimes reported to be inferior. A few fans which are composed of very coarse detritus are considered un cultivable. Fans slope towards the main river, and some terracing is necessary.

Cultivation on terraces and fans is found in all parts of Hindistan, and both features are present in most localities. Cultivation may also be possible on the lower slopes of valley sides, but extensive terracing is then necessary. (See photograph 3 opp. p.13) In a few localities, the slopes of shoulders and spurs of high ground may also permit terracing and cultivation. (See photograph 45 opp. p.129)

Clarification

The average summer snow-line of the western Karakoram is at about 26,000'. In the south and west it is generally at a slightly lower altitude. Those parts of the mountains which are above the permanent

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5 By 'locality' is meant a small geographical area, typically an inhabited stretch of valley not exceeding 10 miles in length, with relatively easy internal communications, and containing a centre of settlement or a group of adjacent villages.

6 Paffen et al., 1956, p.15.
snow-line support glaciers: approximately one-seventh of the total area of Pakistan is covered by permanent ice and snow. (*See map 3, opp. p. 11.*) The Karakoram range in particular, as a result of its greater average elevation, is "... the most heavily glaciated outside sub-polar latitudes." The glaciers vary in size: some lying parallel to the syntactic orientation may exceed 30 miles in length; others which descend at right angles to the main watershed may be steep and short. The snouts of Karakoram glaciers may descend as low as 3,000 ft., i.e. to within inhabited altitudes, whereas the glacier-snuts of Nanga Parbat and the Hindu Kush are generally at 11,000-12,000 ft.

It appears to be a period of general glacial retreat, but some glaciers are behaving erratically. The reasons for erratic movements have been discussed by Mason, who concludes that the size of the debris basins, gradient and other features "... are so varied that the snout movements appear to be peculiar to each particular glacier." In the present situation of general recession any glacial advance may have disastrous repercussions for inhabitants in the lower parts of the valley. Where a transverse glacier advances across the bed of a main river, a dam of ice may be formed, behind which melt-water collects. If the volume of water is great, and if the dam breaks, a flood is released, as a result of which downstream villages, houses, fields and communications may be washed away, sometimes with considerable loss of life. Many such catastrophes have been recorded, and there are many more instances of smaller movements of glaciers which have had deleterious results for the supply of irrigation water and for the cultivation of a village or locality.

7 *Mason, 1933, p. 16.*
8 *Mason, 1933, p. 16.*
10 *Cf. for example, Arew, 1675, p. 393-402; Singh, 1917, pp. 6-7; Kenneth Mason, "Indus Floods and Shyok Glaciers", *J. Geol.,* I, No. 1, (1929), p. 10.*
The climate of Swatistan varies with both altitude and latitude, but the valley bottoms have in common one feature of great importance for agriculture: this is their aridity. The monthly precipitation figures for 7 meteorological stations within the region, all of which are located in valley bottoms, are set out on map 4 (opposite). Although the region is limited by the small number of stations, it is clear from other evidence that the total annual precipitation in the valley bottoms is greater in the south and south-west of Swatistan, where it may reach 20", while in the north and east, 10"-15" is typical. Although this variation is apparently slight, it has important consequences for the vegetation, and hence for livestock husbandry. That the precipitation is both low and varying is due to the presence of other mountains to the south which largely shield the valleys of Swatistan from moisture-bearing winds, both monsoonal and other. The outer hills consequently receive a much higher annual precipitation as exemplified by Murree, which receives 50".

Mean daily maximum and minimum temperatures for January and July are given in table 1.

<table>
<thead>
<tr>
<th>Station</th>
<th>Altitude</th>
<th>January Maximum</th>
<th>January Minimum</th>
<th>July Maximum</th>
<th>July Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilas village</td>
<td>4,100'</td>
<td>21.0</td>
<td>13.6</td>
<td>10.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Kalam</td>
<td>4,500'</td>
<td>24.0</td>
<td>11.0</td>
<td>22.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Lower</td>
<td>4,600'</td>
<td>45.7</td>
<td>21.0</td>
<td>27.7</td>
<td>12.3</td>
</tr>
<tr>
<td>Gilgit town</td>
<td>4,900'</td>
<td>56.3</td>
<td>22.0</td>
<td>35.6</td>
<td>12.7</td>
</tr>
<tr>
<td>Chilas town</td>
<td>5,000'</td>
<td>46.9</td>
<td>21.0</td>
<td>24.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Upis village</td>
<td>7,075'</td>
<td>33.1</td>
<td>22.2</td>
<td>23.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Abbott village</td>
<td>5,640'</td>
<td>33.5</td>
<td>21.9</td>
<td>31.2</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Table 1. Mean daily temperatures for 7 meteorological stations in the region.

Likely from data provided by the Pakistan Meteorological Department. Figures for Chilas town from R.C. Yervar and A.K. Roy, "Meteorological Conditions Affecting Aviation over the North West Frontier," 1934.
It is clear from the data that there is a considerable diurnal range and, more important, a wide annual range, so that the agricultural year is divided into two main seasons, summer and winter. High daytime temperatures in summer add to the aridity of the valleys, especially as sun temperatures are higher in relation to shade temperatures at greater altitudes.

Data concerning the vertical distribution of precipitation is largely absent. It is clear from the presence of permanent snow that precipitation is greater at higher altitudes, and this is confirmed by the unfavourable weather frequently experienced by surveyors and mountaineers, at times when the valleys have remained dry. It also appears that, at lower altitudes, precipitation is less in the north and north-east, hence the higher snow-line of the Karakoram. Similar variation can be observed in the winter snow-covers: at the head of the Sunt valley and in the Astor valley, snow may lie at an altitude of 6,000' for 5 or 6 months, whereas at the same altitude in the Hunza valley, it is exceptional for snow to lie for more than a few days.

The limited data from the meteorological stations does illustrate a decrease in temperatures with increasing altitude. (See table 1, p.16.) For successive altitude levels the period during which temperatures are unfavorable to plant growth decreases in length, thus limiting the cultivation of all arable crops at present sown in the region to altitudes below about 12,000', and limiting the cultivation of two crops in one year to altitudes below about 8,000'. Another feature that should be mentioned in connection with variations in climate is aspect. South-facing slopes receive a greater degree of insolation than those facing north. Quantitative data for temperatures is wanting, but the effect

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13 Winter travellers have recorded the contrast between snow conditions on the mountain passes to the south, where snow-falls are early and heavy, and may impede travel, and those in the north, where the snow cover may be light, and the passes may remain praticable throughout the winter. See, for example, J.F. Knight, Where Three Empires Meet, etc., London, 1895, p.505, (for full title, see bibliography).
of this can be seen in the zoning of the natural vegetation, and in the varying position of the snow-line.

Within the altitude limits suitable for cultivation, the most important implication of the climate for agriculture is the necessity for irrigation. Except in the southernmost part of the Chitral valley, and in the valleys draining south from the Gilgit-Indus watershed, where the slightly greater precipitation permits a limited amount of rain-fed cultivation, all arable land must be irrigated. The source of irrigation water, which is especially required during the summer growing season, is the melting snow at ice of higher altitudes.

Vegetation 24

The vertical zoning of the natural vegetation is conspicuous, (see photographs 1, 4, opp. pp. 12, 27) and is associated with climatic factors, especially the increase in precipitation with altitude, and the accompanying decrease in temperature. Horizontal variation in precipitation is also important in affecting the composition of the flora: in the north and north-east, both the number of species and their relative abundance are limited by the greater aridity, while in the south and south-west the flora is richer and denser, its growth more luxuriant, and the vegetational zoning more complete. Nevertheless the same zones can be recognized throughout the region. One feature of the relief which makes for uniformity is the generally lower average altitude of the main valley bottoms in the south, which "compensates" for the greater aridity of the north. Thus, although the Hinga, Pabat area is approximately twice as rich in vascular species as the Hunza valley, the bottom of the Indus valley, being 3,000' lower than the east-west stretch of the Hunza valley, supports a flora belonging to the same vegetational zone.

The bottoms and lower slopes of the main valleys are included in the desert-steppe zone, characterized by a short and sparse vegetation of shrubs, grasses and herbs. (See photographs 1, 2 opp. p. 12).

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24 This section is based on observations in the region, and on data given by Paffen et al., 1956, pp. 23-7.
On alluvial features and the banks of rivers, additional species may occur: tamarisk is often conspicuous. (See photograph 32, opp. p. 96). This desert-steppe zone reaches up to nearly 7,000' in the Indus valley, but in the north of the Punjab valley it may reach 9,000', although, due to the higher valley bottoms, its vertical extent is less in the north.

The desert-steppe grades into the Artemisia-steppe, where up to 70% of the ground may be covered with dwarf shrubs, especially Artemisia maritima, and perennial grasses, which provide scanty grazing for goats and sheep. (See photographs 4, 17 opp. pp. 27, 46) The top of this zone varies about 9,500', according to aspect, but in the extreme north-east it may extend higher. Towards the top may appear shrubs and trees; in the north these are represented only by a single species of juniper, and only at altitudes above 8,500'.

15 Towards the south and west, this forest-steppe zone becomes increasingly characterised by Pinus canariensis and Quercus ilex. The latter first appears at the top of the zone, at about 8,000', on the southern slopes of Makapachi, and in the Chitral valley from the approximate latitude of the confluence of the Indus and Chitral rivers. Towards south and west, this tree is found at progressively lower altitudes, until in the tributaries of the Indus west of Hanga Parbat, it extends down to the bottom of the Artemisia-steppe zone, roughly coinciding with the level of the valley floors at about 6,000'.

16 Since this tree has been the only source of fuel for this part of the region, its occurrence at such high altitudes, and the scarcity of other woody species may not be entirely due to climatic factors.

17 This tree is variously known as stone oak, holo oak, evergreen oak, holly-oak and ilex. Holly-oak will be used here.

the Chitral valley, the greater precipitation permits this tree to occupy the valley floor as low as 4,000' at Kame Nisar. In many parts of the south it forms considerable forests. (See photograph 16, opp. p.13) The significance of this for agriculture is very great, for its evergreen foliage is an important item of winter fodder for goats and sheep.

Above Artemisia-steppe and forest-steppe follows the coniferous forest zone, but this is found as a clearly visible feature only as far north as the northern slopes of Rakaosh (see photograph 1, opp. p.12), and is generally richer in species and denser towards the south and west. North of Rakaosh, and in the valleys of the northern tributaries of the Gilgit river, and in the north of the Chitral valley, the zone may be represented at about 12,000' by juniper and non-coniferous brushwood, with only very occasional conifers of other species. North of the main Karakoram crest and in the Sarogil locality at the extreme north of the Chitral valley there are virtually no traces of this coniferous zone. (See photograph 21, opp. p.175) From Rakaosh south-westwards, in the Astor valley, on the southern slopes of the Gilgit-Indus watersheds, at the heads of the Saut and Pankora valleys and in the south of the Chitral valley, the coniferous forest is increasingly clearly represented by additional species, including spruce, pine, fir and cedar.

In the Minor valley the coniferous zone extends from 9,500' to 11,500' (for a similar zoning, see photograph 3, opp. p.13), while in the Chitral valley, at the confluence of the Ushu and Utrot tributaries, conifers occur as low as 6,500'. (See photograph 9, opp. p.80). They may form dense forests, and in many of these southern valleys the timber is sufficient for extensive exploitation.

Above the coniferous forest is a zone of sub-Alpine deciduous scrub, with birch, willow, rowan and dwarf-juniper, together with herbs and grasses. (See photograph 4, opp. p.27) This is to be found, to greater or lesser extent, throughout the region, even
more coniferous forest is not represented, and occurring from about 11,000" to 12,000". Above, stretching up towards the snow-line to heights determined locally by gradient, aspect, and soil conditions, is the zone of Alpine meadow. As in other zones, the flora of the south and west is richer in species and more luxuriant in growth.

In the north of the Hunza valley there may be only *Polygnum affine*, which is not grazed by animals, and two or three other species extending up to about 14,000", at which altitude the ground becomes subject to ground frost and local soil-weathering processes.

The local importance of aspect is illustrated by the difference in vegetational zoning between the north-facing and south-facing slopes of the east-west stretch of the Hunza valley. On the north-facing slope, as above Minapin, the coniferous forest zone is well represented by conspicuous stands of timber, while on the opposite side of the valley, conifers are virtually absent. (See photographs 1, 4 opp. pp. 12, 27) This is illustrated by map 4 (opposite p. 16), on which the vertical vegetational zones for different localities are set out diagramatically to demonstrate the degree of variation within the region.

The major consequence of this variation for the economy of the region is the richer and more luxuriant growth of the vegetation in the south and west, which provides abundant timber, which may be totally absent in the north, an evergreen source of winter fodder, also absent in north and east, and richer pasture, which may be very sparse to north and east.

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Non-arable Resources

The pasture resources of the south are greater not only because the climate there is more favourable for plant growth. As a consequence of the generally lower altitudes in the south, a larger proportion of the surface area falls within those altitude limits which are favourable to plant growth, while a relatively smaller proportion of the surface area is above the altitude where permanent snow, low temperatures and a short growing season prevent or restrict plant growth. To some extent the greater richness and extent of pastures in the south is offset by the longer period during which snow lies on the ground, and grazing is thereby impossible. However, the length of winter season for any pasture depends also on local circumstances, especially upon the altitude of the pasture and upon gradient and aspect. In the punjab-like area at the head of the Chitral valley, which lies altogether above 11,000 ft, and where the season of snowfall in the valley bottoms is 6 months, it appears that high winds cause the snow to drift, and prevent it from covering the whole surface of the pastures, so that some grazing is possible during the winter. Elsewhere, animals are stall-fed, and for this the holly-oak of the south is an economic resource of very great importance. 19

Another component of the flora which is of major economic importance in the forests of the southern valleys are the conifers of the southern valleys. These trees have been a source of local building material, and have also been commercially exploited, although this process is now largely controlled and conducted by the Pakistan Government. 20 It is not known what extent exploitation of grazing has had upon the occurrence of conifers or other components of the vegetation. As suggested by Paffen 21 it is likely that the scarcity of timber in the northern part of the region has been accentuated by

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19 See also Stein, 1923, p. 15; Peter Snoy, "Last Images of the Himalaya", Natural History, LXXII, No. 8, (Nov. 1922), p. 22; Jettmar, 1931.
20 The location, extent and quality of the forests of the southern valleys has been discussed by H. I. Wright under the general heading of "Forests beyond the Indus" in four consecutive numbers of The Indian Forester, LV, Nos. 5-8, (May-Aug. 1939), pp. 251-4, 311-4, 399-93, 461-71. (Subtitles are given in the bibliography).
21 Paffen et al., 1956, p. 25.
cutting and grazing; and that formerly the coniferous zone was more
densely represented there. The cutting of timber at a rate faster than
it replaces itself appears to have been proceeding in many localities
during the last 100 years; several informants from various parts of
the region reported that there had been more trees within living memory;
and Biddulph wrote in the 1870s that on the hills around Gilgit "... everywhere above 7,000' are thick fine forests ..." 22 Although such
evidence may be of limited value, it does indicate that there has been
some deterioration in the vegetation. Climatic changes may have contrib-
uted to this. There is some evidence of a general decrease in precipi-
tation 23, with which the general recession of glaciers may be associated.

Some other products of the flora - rats and herbs - have been
collected by local inhabitants, but there are none which are recognised
as significant potential resources.

Also associated with the vegetation is another natural feature -
the fauna. Both the mammal and bird fauna have deteriorated within living
memory, both in total numbers and in numbers of species represented.
In 1901, 16 mammalian species were listed as present in the Chitral
valley 24; from contemporary information it appears that nearly half of
these are no longer found there. Motives for hunting have been sport;
food, and the utilization of pests and predators. It is also possible
that deterioration of the vegetation and competition with domestic animals
for grazing have contributed. The mammals which are still present, though
no longer in sufficient numbers to be of economic importance, are ibex
(capra ibex), markhor (capra falconeri), the snow leopard (panthera uncia
and serows, jackals and wolves. More rare, but occasionally reported are
black and brown bears, wild sheep and marmots. (via common polii is now
virtually extinct in Pakistan.

22 Biddulph, 1870, p.21.
Sabasir L Khan, "Recent Thalimetric Changes in the Arid and Semi-
Arid Zones of West Pakistan", Pakistan Geographical Review, XV, No. 1,
(Natural Science), No. 1, (Aug. 1901), pp.2-5.
Birds, particularly migratory duck, have probably been at least an equally important natural source of meat, especially in those valleys through which the birds pass on their spring migration northwards. Within living memory, the number of duck making the annual migration has become much reduced. Reasons for this are being investigated. Chukor and red chukor, both game birds, are also present in many localities, but also in smaller numbers than in the past. If non-game birds the only ones to have been of economic importance are goshawks, which were formerly, and now to a lesser extent, captured in the Chitral valley and elsewhere, and trained either for local use or for export. Some of these males or birds are present in sufficient numbers to be commercially exploitable on anything but a small scale.

Fish are present in some rivers, and have occasionally been caught for food, but indigenous species are not a popular food. Trout have been introduced into a number of rivers and streams, and where they thrive they are already providing sport and some small addition to the natural food supply.

Several minerals of economic importance occur in Pakistan, but seldom in sufficient quantity to be commercially extracted, especially with the existing high costs of transport to markets or industrial centres. The only commercial mineral working at present located in the region is at Kriji, where Pakistan Industries Ltd. have a 24-year concession to extract antimony. Occasionally, in the past, argentine and lead have been mined in the Chitral valley, mostly for local use and for jumboot, but occasionally for export. Particles of gold are present in some river sands, and washing for them has been an occasional practice, but it appears to give a meagre economic return. Another natural product which has occasionally been exported, and which is also used in the region, is salil. This is a pitch-like exudation found on rocks in some localities and greatly prized in local medicine.

25 Christopher Savage, personal communication.
Water — Resources and Irrigation

Given the permanent supply of water from melting snow and ice and given occasional small areas of land of gradients suitable for cultivation, the problem is then to combine these. This is done by the construction of small irrigation channels, capable of a discharge of 2 - 15 cubic meters per second, which conduct water from the source, usually a stream or river, to the cultivated area. The channel is divided into a network of smaller channels and ditches through which water reaches every field. Since the water flows by gravity, the head of the channel has to be at a higher level than the cultivation. Most of the cultivation is on river terraces and debris fans; both of these features are often associated with tributary streams which typically are 'tapped' by the channel at an appropriate level above the cultivation. This cultivation on a fan or terrace is often dependent for its irrigation water on the precipitation within an associated side-valley. Where the supply of water is insufficient in volume, or where the cultivated area is not associated with a tributary stream, it may be possible for water to be conducted from another catchment basin; some present-day channels are several miles in length. It is however seldom possible to divert water from the main rivers, often because the cultivated area is at a considerable height above the river, and may be bounded by a vertical cliff, and in general because the main rivers are too erratic and variable in their seasonal levels for it to be possible to construct new works for a channel. A few areas are irrigated from the main rivers, but the difficulties are usually reckoned to be unmanageable, even with modern techniques.

Within tributary valleys the sources of streams are melting snow, melting ice, springs, which are indirectly fed by melt-water, or some combination of these. At the beginning of the summer season, melting snow may cause a large increase in the discharge of rivers and streams, but by the middle of summer each snow bank: the permanent snow-line has melted, and the flow of water consequently slackens. Where the catchment basin is small, or at a low altitude, or after an unusually
light winter's snowfall, or an unusually early and hot spring, the snow may all be melted by the middle of summer. If this happens in a basin where the stream is entirely snow-fed, there may be insufficient water for the second part of the summer season. Cultivation is then either not possible or is limited, unless the water supply is supplemented. In other circumstances, a late or cloudy spring may delay the melt so that there is insufficient water for the spring crops.

Glaciers yield a steadier and more continuous flow of melt-water, and are therefore preferred as sources of irrigation water. There are however particular hazards associated with glaciers which may have serious consequences for irrigation and cultivation and which may permanently influence local settlement. It has been noted above that this is a period of general retreat, but that some glaciers are behaving erratically. In the Karakoram some exceptionally rapid advances have been recorded which have brought danger and destruction to nearby settlements. In 1903 the Yarrow or glacier advanced about 3 miles in 6 days, destroying fields, houses and other property in the Gasher locality and preventing cultivation there for 12 years. In 1933 the Abish or glacier advanced at a rate of 116 yards in 24 hours, and many other striking advances have been recorded.

Even small glacial movements can have profound effects upon a local economy, especially in the Karakoram, where glacier snouts may descend almost to the cultivation.

Many Karakoram glaciers have a village located just below their snout region. The villagers depend entirely on the meltwater for their water supply, both for domestic consumption and for the irrigation of their fields, and are concerned about the movements of the snout because they override and cut off water supply channels dug to lead away the meltwater from the glacier.31

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31 Cambridge Expedition, 1961, p.15.
At Mirzapur, an apparent change in the configuration of the snow-ice, without any significant advance in its position, was sufficient to cause a major irrigation channel to become dry. 32 (See photograph 4 opposite.) Glacial retreats may be equally unfavourable. The retreat and final disappearance of the Hasanshad glacier has recently deprived a village of its water supply. 33 Such dramatic consequences of glacial fluctuation are largely confined to the Karakoram, but several instances were recorded, both in that range and elsewhere, where a village or an area of cultivated land had been abandoned because of some change in the conditions affecting the water supply. 34

Physical Difficulties of Travel

The difficulties and dangers of travel in Kurdistan have been a favourite theme for visitors and writers for centuries—from the first-hand accounts of Chinese Buddhist pilgrims of the fifth century 35, to the most recent world-travellers. 36 There have been changes and improvements in the 20th century, and motor vehicles can now be used in some areas. However a combination of environmental features exceedingly unfavourable to movement characterises Kurdistan, and has had a decisive influence upon human history and organization there.

The difficulties of travel and transport arise from many of the physical features: the great heights of the mountains and the great range in altitude from the peaks to the valley bottoms; the steep longitudinal gradients of many valleys and the even steeper gradients of valley sides; the active erosion by ice and water, which undermines cliffs and mountain sides, causes floods, rock-falls and landslides.

32 Cambridge Expedition, 1912, p.17.
33 Jaffar et al. 1956, p.46.
35 Stein, 1926, I, pp.20-1.
and activates crevasses and stone-shoots. Added to these are the difficulties of crossing the main rivers in all seasons\(^{37}\), and of crossing even the smallest watercourses when in spate during the period of summer melt, and the impossibility of negotiating many of the gorge sections which are typical of the lower reaches of many valleys. The waterheads may be crossed in summer here and there at 10-12,000\(^{1}\) by passes, but the ascent to these is almost invariably arduous and sometimes hazardous, especially where the route crosses avalanche slopes or crevassed ice. Some passes even vary in feasibility from year to year, depending on ice movements and the extent of crevassing. Several former routes across the Hindu Kush have now become completely closed due to glacial movement.\(^{38}\) Passes are often open only for a few months in the summer; in the winter, blizzards, the depth of snow and low temperatures make them impassable or exceedingly dangerous\(^{39}\).

The nature of the relief often makes it necessary to follow a path from which it is not possible to reach water; the route from the Gilgit valley along the Indus to Baltistan has been notorious for the absence of water for long distances. The Indus valley in general is notorious for very high daytime temperatures, so that in summer long-distance travel on foot is undertaken only on moonlit nights or in the hours of dawn. In many localities, in the past, it was difficult to obtain food and fuel, and on those few routes where it was possible to take horses and pack-animals there was frequently insufficient fodder and grazing.

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\(^{37}\) Traditional methods of crossing the main rivers are illustrated by photographs 30, 31, 32, opp. pp. 196.


\(^{39}\) The heavy snow-falls of the south make the southern passes especially liable to avalanches, as a consequence of which many lives are lost. See, for a recent instance, The Pakistan Times, 4th March, 1965. Early spring is the season when avalanches are most dangerous. In the following year an avalanche in the north of the Chitral valley killed more than 40 people and caused much damage. See also The Guardian, 14th April, 1966 (First Edition).
The consequence of these barriers to movement has been the physical isolation, not only of Kurdistan from the outside world, but of its inhabited valleys one from another. It has been described as a 'refuge environment', where small groups of inhabitants have retained languages and other features, some of which were formerly spread far beyond Kurdistan, and where small groups of refugees, fleeing from adjoining regions, have established themselves with their particular characteristics and forms of organization. Outside influences have slowly penetrated, but from different directions and to varying extents, and the heterogeneity has been maintained up to the present.
The total population of the region was approximately 300,000 at the time of the 1961 census. This gives a rough overall population density of 10 per square mile. All but a small fraction live in discrete villages, mostly located in the main river valleys, wherever conditions are favourable for cultivation. There are no urban settlements, but it is customary among the local populations to refer to the settlements of Gilgit and Chitral as 'Gilgit town' and 'Chitral town'. These have long been the economic and political centres of the region, partly as a consequence of their strategic positions, and also by virtue of their being surrounded by relatively large areas of more or less continuous cultivation. Both lie upon ancient trade routes, and both have been the administrative centres of small kingdoms for at least as far back as there are any historical records or extant traditions. In the 19th century both became garrison outposts for British-India's northern frontier. They continue to-day to be the major administrative centres of the region, and contain two of the most important bazaars.

Villages vary in size from a few houses to several hundred. Larger villages are subdivided according to various local systems.

1 Population data for 1961 which is used in this chapter is obtained from Population Census of Pakistan 1961, "Village Report of Tribal Agencies", Part III (Village Statistics), pp. 12, 32, 170; unpublished data provided by the Ministry of Kashmir Affairs, Rawalpindi.

2 This convention is followed in the present discussion to avoid confusion between these eponymous settlements and the larger administrative units surrounding them.

3 Malalha, 1880, p. 19; Stein, 1921, I, pp. 27, 36; Alder, 1963, p. 11.
but the proper names in use pertain to units of settlement that are clearly defined in local parlance. These proper names refer not only to the inhabited houses, but also to the cultivated land surrounding them, and although the cultivation of some adjacent villages has ceased, most remain discrete cases. (See photographs 1, 2 opp. p. 12.)

There are also temporary settlements of various kinds in some of the summer pasture areas.

All but a very small fraction of the population are engaged in agriculture, though an appreciable number are now taking additional non-agricultural employment in the winter season. The non-agricultural section of the population consists of Government officials from other parts of Pakistan, (mostly stationed in Gilgit and Chitral towns for two or three year periods), traders conducting business at one of the bazaars, and the very small number of regional inhabitants who have taken full-time alternative employment.

In all parts, the agriculture is a combination of arable cultivation, horticulture, and animal-husbandry. Most agriculturalists have proprietary rights to holdings which are mostly between 1 and 5 acres in size. There is also a number of agricultural labourers and monks who have no rights to cultivable land.

Components of the Population

The linguistic and ethnic diversity of the population is extreme. Including Pakistan Government personnel, there are 19 distinct languages spoken within the region by its inhabitants, and of several of these there are two or more dialects. Each language is more or less closely related to a corresponding ethnic group. There has been no comprehensive ethnic survey of the region, and at present the only consistent method by which the inhabitants can be grouped and classified in detail is by their linguistic characteristics. For the present study this is not satisfactory.

4 The languages are Shina, Burushaski, houra, Khowateli (K-dialect), Mard, Masha, Kati-Veri, Gamar-Dati, Pashto, Shalura, Yakh, Hazarhaski, Ridana, Turk, Gujari, Pashto, Tuski and Pashto.

- 31 -
because linguistic characteristics do not necessarily distinguish groups having different ethnic origins, they appear to have little or no relevance to economic organization and they are seldom referred to by the inhabitants of the region themselves.

The subdivisions of the population which are distinguished and employed by the inhabitants themselves, and which have been used in the literature, are mostly based on criteria of descent and genetic relationship, though language is sometimes referred to, and many descent divisions coincide with linguistic ones. This 'system' is however inconsistent, its subdivisions are not of equal 'weight', and it may have little scientific value. Nevertheless it has considerable practical advantages: for example, it distinguishes different elements in the Shima-speaking population which a linguistic classification would not. At the same time, it differentiates groups which can be recognized by their linguistic and cultural characteristics, even though the physical anthropologist may be unable to distinguish them. For example, the Murishe and Ikhi of Huttar are not distinguished by physical measurements, yet they '... differ markedly in character ...'; their languages '... are quite distinct from each other ...', and they '... constitute distinct communities, in a large measure socially and economically independent of each other.' Because the 'regional system' is convenient, relevant and comprehensive, because it is the system to which data collected - both from informants and from the literature - refers, and because its subdivisions can generally be related to the present organization and recent history of the region's inhabitants, and to the physical characteristics and features of the region; it is therefore employed in the present

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5 It does not appear that language is a barrier to social or commercial intercourse. An individual speaks whatever languages he comes into contact with, sometimes as many as eight.

6 Forant, 1936, p.23.

The proper names given are those by which the groups are known in the region and in the literature. It is not practicable to use consistent linguistic forms because so many different languages are involved, and these names, framed by the addition of -a or -e, have already been used extensively in the literature are they used here.

My local usage of 'Qalash' refers only to those who, at any time, are practising the Kalash religion, and this usage is adopted here, although philologists apply the name to other people in the lower Chitral valley among whom tradition, language, and a characteristic architecture confirm their relationship with the now smaller group who continue as non-believers.


"Kohistan is a general term in the Pashto language for the non-Pashtun inhabitants of outlying, mountainous areas." Barth, 1956, p.15.

As used in Swat, it refers to all the non-Pashtun inhabitants of Insha Kohistan and the upper Swat valley, i.e. the Sawari, the Torwali, the Kohistanis, (both S- and K- dialect groups, who disclaim genetic relationship) and some smaller groups. Only the Sawari and members of the K-dialect group living in Mandia - (the Mandianis) - come within the boundaries of the region. Since much of the descriptive material in the literature applies to Kohistan in general, the term Kohistan is used in the present study in this general sense, but is intended to have particular reference to the Sawari and the Mandianis. As 'Swat Kohistan' refers to the areas inhabited by the Sawari and the Torwali, the Sawari area (i.e. the northern part of Swat Kohistan) is referred to here as 'Sawari Kohistan'. "Insha Kohistan" refers to the valleys of Insha, Dubar, Sec and Fatan, and to some others on the left bank of the Indus. Its southern boundary marks the southern edge of Kohistan valley. On the Insha Kohistan valleys, only Mandia is included in the region studied.

This group, together with the two following, all of whom inhabit neighbouring localities in the southern Chitral valley, and who have a number of features in common are collectively designated as the "non-bols" of southern Chitral.

Gero von Augustenberge, Notes on Janu-Paiti, Oslo, 1950, pp.7-6.

Gero von Augustenberge, "Notes on Januli" etc., Norak Ideenschrift der Schwedischen, Oslo, 1950, pp.116-3, (for full title, see bibliography).

dissertation. The subdivisions which have resulted are not exclusively linguistic, though most can be linguistically defined. For are they invariably ethnic. As far as possible the proper names in common use are employed.

The groups can be roughly divided into two categories: those which are composed of recent immigrants into the region, and those which have been established in the region for several centuries at least, and mostly prior to the Islamic conversion, which occurred in many parts of Kurdistan between the 15th and 19th centuries. The origins of these ancient groups are mostly lost, they may not necessarily speak their ancestral language, and their division from the remainder of the population may be in the form of a 'caste' or class barrier. The groups comprising this category are listed opposite in Table 2, together with rough estimates of their numerical strengths. Their regional distribution is shown by map 5 (opp. p.35).

The category of recent immigrants is composed of discrete groups whose origins are known, the circumstances of whose migration are also mostly known, who continue to speak their ancestral languages, and who are distinguished in the region as being immigrants. Although some of these groups may number several thousand members, they seldom have any corporate organization, and tend to be scattered rather than associated with particular territories. Some were resident in the region before the Islamic conversion, but most have immigrated more recently, although few within living memory.

Estimates of numerical strengths for groups listed in Tables 2 and 3 (below) are based on the following sources:
Census 1921, XXII, Part II, pp.109, 114-5;
Census 1931, XXII, Part II, pp.286, 302;
Census 1941, XXII, Part III, p.513;
Buhufal, 1930, p.34; Thakar Singh, 1917, p.46: the authors cited for particular groups and observations and informants in the region.
<table>
<thead>
<tr>
<th>Name of group, its approximate numerical strength A Language/s.</th>
<th>Regional distribution and origin or former distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathans</td>
<td>Settled as traders in some bazaars, especially at Chitral town and Irazm, where they have been present since the 19th century.</td>
</tr>
<tr>
<td>Pakhto</td>
<td>Present for about a decade as refugees, mostly as traders in Gilgit town, and in Lehkowen and Pari villages.</td>
</tr>
<tr>
<td>Israr-ul-Haq, 1963, p.97</td>
<td></td>
</tr>
</tbody>
</table>

- Keshgari
  - 200 - 500 Pakhto
  - Turkic


20 Keshgari is the name by which settlers from Wuristan are known in the Chitral valley among the Kho population, although the connections of some of these immigrants may be with other valleys of Wuristan. The immigrants are also sometimes known as Kati (after the tribe of the majority), but this name may refer primarily to the period before they embraced Islam. Wuristan is retained for the present inhabitants of Wuristan.

21 The third section of Kashmiri, the Pathans and the Keshgari, - i.e. those groups which are non-agricultural but which have immigrated to Wuristan for the purpose of trade, mostly within the last 100 years, and whose members do not necessarily remain permanently resident in the region - are designated 'outiders', together with all temporary visitors and officials.

22 Keshgari is the name by which the inhabitants of Eastern Turkestan are known in the Gilgit valley, although not all those now settled in the region are necessarily from the city of Keshgar.
Name of group, its approximate
numerical strength & language/c.
References and Authorities

<table>
<thead>
<tr>
<th>Name</th>
<th>Numerical Strength</th>
<th>Language</th>
<th>References and Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baloch</td>
<td>2,000</td>
<td>Baloch</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Chishti</td>
<td>1,500</td>
<td>Persian</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Gujjar</td>
<td>1,500</td>
<td>Gujjar</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Kalash</td>
<td>1,000</td>
<td>Persian</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Khardi</td>
<td>1,000</td>
<td>Khardi</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Linnar</td>
<td>1,000</td>
<td>Linnar</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Makni</td>
<td>2,000</td>
<td>Makni</td>
<td>1956a, pp. 26, 40-1</td>
</tr>
<tr>
<td>Mestri</td>
<td>1,000</td>
<td>Mestri</td>
<td>1956a, pp. 26, 40-1</td>
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<tr>
<td>Nanjua</td>
<td>1,000</td>
<td>Nanjua</td>
<td>1956a, pp. 26, 40-1</td>
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</tr>
</tbody>
</table>

Regional distribution
and origin or former distribution.

- Mostly at high altitudes throughout the south
  Karakoram. Present in small numbers as far
  as the Gilgit and Indus valleys. (Many Gujaras
  from the region in winter, but others are not
  settled or follow an extended transhumance pat
  tern within the region. Winter migrants have not
  been included in the present study.)

- An ancient migratory tribe of India who, in the
  Punjab, retained their pastoral proclivities. I
  began to migrate northwards c.400 years ago, a
  process encouraged by the irrigation of the Deo
  and their consequent loss of grazing territory.
  Now found also in the Vale of Beshair and in south
  Pakistan.

- At high altitudes in the upper Hunza valley (Nch:
  the upper Ishkoman valley, and Baroghil).

- Immigrant and refugee pastoralists from Waziristan, who
  have colonised the head of valleys in the north
  of the region. Baroghil within living memory, Ishkoman
  at the end of the 19th century, and Chalal in the
  18th or early 19th century.

- Scattered in small numbers in most valleys.
  Present in the Hunza valley on the right bank.

- Of saintly status, often descendants of Islamic
  missionaries. Frea various adjacent regions.

- Madagasha village in the upper Ishkoman valley.

- Immigrant and refugee metal-workers from Zabak in
  Badakshan. Settled in the 17th or 18th century.

- Settlements at the heads of the lakes. Rumbur
  Rumboret and Uruma valleys.

- Some small settlements are long-established, but
  most of the present distribution dates from the
  association of Afghanistan by Afghanistan in the 1890s
  and the flight of small groups of non-Moslems who
  have subsequently embraced Islam.

- Several distinct migrations from the Vale of
  Beshair and elsewhere. Established, perhaps for
  many centuries, in the upper Astor valley as
  agriculturalists. Present in Gilgit town since the
  18th century as craftsmen, and there and in other
  bazaars as traders since the middle of the 19th
  century.
The major groups comprising this category are listed in Table 3 opposite together with rough estimates of their numerical strengths. (See also Map 5, opp. p. 3.)

Ethnological movements cannot be discussed in detail, but some features are of economic relevance to the present study. The large-scale tribal movements that are associated with the distribution of the groups of the first category, appear to have taken place to the general detriment of some other group or groups. The Shin expansion in the Indus and lower Gilgit valleys was probably at the expense of a Harushaaki-speaking population, of whom the present Rehals and Dirusho may be the descendants. The Khir, according to tradition spread southwards from the upper Chitral valley displacing the Talash, a process which is still slowly continuing. The Pethan invasions of Dir and Swat in the 15th and 16th centuries resulted in the flight northwards of groups of refugees; in this way, the Sawar-Sati, the Pamoli, the Samri, the Torwals of southern Swat Kohistan, and probably the Indus Kohistan were displaced and driven northwards.23 In such events are to be found the origins of the 'supposed superiority' of one group over another, the explanation of some of the 'caste' divisions of Kohistan, and the origin of much of the present pattern of distribution of agricultural resources.

In contrast, the more recent movements of the immigrant groups appear to have been characterized by the absence of competition for territory and resources. Earth24 has introduced the idea of 'ecological' limits to the expansion of ethnic groups, and has used this to explain the northern boundary of Bastarai expansion in the main Swat valley in terms of the upper altitude limit of double-cropping.


This conception of a 'niche' with ecological limits may be applied to other groups, and it was used by Lorimer, who explained the upper limit of Karusho settlement in the Imam valley in terms of the altitude limit of the apricot.25 If groups occupy ecological 'niches,' and do not readily move out of these, then parts of their environment and the economic opportunities which it offers may remain unexploited.

In the 19th and in earlier centuries, there were niches vacant, and immigrant groups were able to occupy these without any major adjustment in the economic organization of the region. The most striking example is provided by the two pastoral groups, the Gujars and the Kahhis, who were thus able to occupy the higher altitudes of the main valleys, where extensive pastures were being left unutilized by the other groups already settled in the region.26 The immigration of the Kahhis to Gilgit was

"... of the nature of an infiltration into an unoccupied country and not the result of any sort of competition with an established local population..." 27

Similarly the Gujars were able to occupy the upper parts of the Sut and Margah valleys without competition. The existence of an unexploited niche is often a short-term phenomenon, and in time a group's organization and agriculture may become adapted. In the 20th century ecological limits have not remained so clearly defined; the response to rising population pressure is often a fuller exploitation of the environment, as a consequence of which competition arises between groups formerly occupying discrete niches. Since Lorimer's time the Karusho have occupied much of Gilgal, and there is increasing competition between the Gujars and longer-established groups for pasture near Gilgit town and elsewhere.

25 E.Lorimer, 1939, p.3.
26 Schomberg, 1934, p.211; Schomberg, 1935, p.236.
27 E.Lorimer, 1939, p.4.
Isolation and the Advent of Islam

Little is known of the ancient history of Karistan. Some of the first specific references concern episodes in the 8th century, when the Tibetans and Arabs were combining to oppose the Chinese, and when the Gilgit and Chitral valleys acquired considerable strategic importance. There are records and traditions relating to this period and concerning Karistan which tell of much events as the ascent of the Barbot pass by a Chinese army of the presence for a few years of Chinese garrisons in the Gilgit valley, for whom supplies had to be imported from Kashmir; and the invasion of the upper Chitral valley by an Arab army and the initial bringing of Islam. That contacts of this nature, between the inhabitants of Karistan and any of the peoples or countries of the surrounding regions, were exceptional is suggested by the absence of further reliable external records for another 1,000 years, until the middle of the 15th century when the Chinese intervened in the basin valley. In the following century there was an unsuccessful invasion by Tolukshah, and there are traditions in the Chitral, Hunza and Gilgit valleys of invasion by Mongols, but it was not until the advent of Kashmir power in the southeast that there are records of the firm annexion of a part of Karistan and the establishing of any long connection—in this instance for a century—between Karistan and a neighbouring region.

29. A. Stein, 1923, I, p. 36ff.

30. Of this exceptional achievement, Stein has written that it "... deserves fully to rank by the side of the great alpine feats of ... history." A. Stein, "A Chinese Expedition across the Pamirs and Karakorum, A.D. 741," J. As. Lit., 1st ser., xxiv, 2 (Feb. 1923), p. 150.

31. Stein, 1928, I, p. 3 and n.

32. Stein, 1928, I, p. 149.

33. Stein, 1928, I, p. 3.

34. The Imperial Gazetteer of India, A. O. Oxford, 1908, p. 301; A. F. Schoenber, "Kafiristan and Glaciers," Travels on Chitral, London, 1936, p. 70. Schoenber probably travelled more extensively in Karistan than any other author in the period 1920-1947, and has published several books and papers. While his visual observations and factual information are valuable, his commentaries and conclusions, especially those contained in the books, lack objectivity and can seldom be accepted for the purposes of the present study.

35. Muslims Muhammad, 1907, p. 126ff.; J. Scott, Notes on Chitral, Simla 1937, p. 3; Schoenber, 1936, p. 253. The names of Chings Khan and
The sovereignty of Kashmir, and subsequently of British-India, led to a new 'orientation' for the people of Hindistan. Historical links had been mainly with the north, and new Hindistan was to become closely linked and associated with regions to the south. The proximity of Badakhshan and Turkestan had been an important element in Hindistan's history, and writers have drawn attention to the much greater connection which the Chitral valley and its population had with countries to the west and north, and with the Gilgit valley to the east, and the much lesser historical connection there was with countries to the south. Similarly, the Astore, Hunza and Gilgit valleys had cultural and occasionally political links with Turkestan to the north, West Pakistan to the east, and Chitral and Badakhshan to the west. Hindistan also received some cultural influences from the south which have been especially evident in the southern valleys.

Connections with neighbouring countries were, at the most, intermittent. One of the earliest observers remarked that not only were the communities of Hindistan "...utterly ignorant... of any form of society but their own", but that even within Hindistan itself there was very little communication between any two communities (at least for any length of time). Very often it is completely close.

(continued)

34 Taj Mohgul are remembered in connection with these. monuments attribute to Taj Mohgul are seen near Gilgit town and in the Hunza valley.


37 They are exemplified by the Gandhara muffa in the decorative wood-carvings. Stein, 1923, I, pp.20, 27, and photographs 23-4, 25, opp. p.23; Aurel Stein, In Alexander's Track to the Indus, etc. London, 1923, pp.3 and photograph 53, opp. p.33, (for full title, see bibliography); Karl Jettmar, "Schnittarbeiten aus dem Talern Tadjir und Israel", Archiv für Volkerkunde, XIV (1960), passim and photographs I-3, (references hereafter to this work will be cited Jettmar, 1960b.)

38 Vans Agnew, 1915, p.301.
New ideas and influences, which eventually bore to take firm root, in all parts of Kurdistan, spread slowly and unevenly, such interactions as took place were cultural and political, seldom economic. A small volume of trade was conducted in goods which were costly in relation to their bulk and weight, but there was almost no long-distance movement of foodstuffs. Populations at all levels of economic production were self-sufficient, and this was perhaps their outstanding economic characteristic. Given the heterogeneity of the communities of Kurdistan and their low degree of mobility and contact, it is perhaps not so surprising that their most important historical experience — the conversion to Islam — should have been taking place, more or less continuously in different valleys, from the 8th century onward for another thousand years.

The ancient religions organisation of the Kurds is better known as a result of recent ethnographical studies, although the details of sequence and location remain uncertain. Judaism flourished in the main valleys, and there are relics and traditions of Zoroastrianism and perhaps of Zoroastrianism. In addition there have been the religions of the Kelash and of Kuriistan (then Karistan), and at least one Pardic religion. The chronology is not clear, and several of these religions have been practised at the same time in different valleys or supplanted and been displaced by others.

Upon this diversity, and for the isolated and inward-looking communities of Kurdistan, the advent of Islam had a profound effect, not only towards religious and cultural homogeneity, but also for all aspects of political, social and economic organisation. The spread of the new religion — from north, south, east and west — was gradual. Politically it may initially have been insidious, and spreading under the influence of many missionaries, it was accompanied by its own historical schisms which became established in various parts of Kurdistan according to the countries of origin of the missionaries.

39 Siddulph, 1880, p.21; the Imperial Gazetteer of India, II, Oxford, 1900, p.239.
40 Although the circumstances and date of the conversion are generally unknown, the name and origin of the first missionary is remembered in most localities.
Similarly, the multiplicity of missionarism influenced the incidental establishment of varying political and social systems, which again appear to have been those characteristic of the countries from which the missionaries themselves came.

Thus the south of Balıstan, which was converted by Sunni missionaries from the Swat valley, was subject to strong non-Muslim influences, especially from the Kasuwaï, who by then occupied the main Swat valley. The conversion appears to have been accompanied by the overthrow of local dynasties and the establishment of a tribal form of government among the Kasuwaï. At the same time, a new settlement pattern and the particular land-holding system then current among the Kasuwaï were introduced. Conversion in the southern valleys - i.e. the Indus valley and its southern tributaries, Indus Kohistan, the upper Swat valley and the southermost part of the Chitral valley - was proceeding during the 17th and 18th centuries.

So the east came Shia missionary influences. The Sayed Shah Buria, by legend the first Iranian to enter the Hunza valley, is said to have come from Shi'a Persia, via India, Kashmir and Baltistan, and to have converted the inhabitants of the Hunza and Gilgit valleys. He has been assigned to the 16th or 17th century. The Ismaili influence is traced to Badakhshan and eastern Turkestan, and is paramount in the west and north of Balıstan. It largely replaced the Shia doctrine, which now survives on the left bank of the Hunza river, and in a few villages elsewhere. The Shia and Ismaili missionaries came from societies where a centralized autocratic rule was well-established, where there were hierarchies of social classes on where resources were individualized. Centralized government, which already existed in much of the north of Balıstan, was thus favoured, although there were some dynamic changes.

41 North, 1956a, pp. 19-20; Jettmar, 1961, pp. 52-57.
42 Subsequently there has been some Sunni expansion northwards in the Chitral valley, partly due to the influence of the ruling family there, and partly as a result of further missionary activity; Ismar-ad-Din, 1965, p. 101.
The spread of Islam in the main Chitral valley coincided with the later stages of the expansion under the Fatare dynasty, and with the final disintegration of Kalash political power in the 17th century. The Kalash religion has continued to be practised by a diminishing number of Kalash who are now confined to the Perir, Bumboret and Bumbor valleys. In September 1950 they numbered about 1,400. The majority of the population of Muristan embraced Islam at the end of the 17th century, but a small number of immigrants to the south of the Chitral valley continued to practise their religion until the 1930s.

Relatively few in numbers, the Kalash and Bashgali are nevertheless interesting in the present discussion for continuing to exhibit certain political, social and economic characteristics. Although the present characteristics of other sections of the population may be dissimilar, some may, in the past, have been more like those of the Kalash and Bashgali. Study of these two groups assists in understanding and interpreting many otherwise anomalous agricultural and economic practices. Many writers have commented upon the continuance and strength of ancient attitudes and practices throughout Muristan.

The Northern Principalities in the 19th and 20th centuries

The early travellers in Muristan discovered that the populations of the northern valleys were divided among a number of well-established princely states, whose boundaries were largely geographical, and to some extent were ethnic and linguistic. (See map opp. p. 44) Each state was ruled by a hereditary autocratic chief, with the support of

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43 Crazzolari, 1961, p.151. Within living memory the valleys of Jingerat Khan and Urtun have become wholly Moslem. The apparent lack of coherence and the 'disintegration' observed among the Kalash, e.g. by Rosco Harman, where Four Worlds Meet; Hishtu Nash 1927, Leonard, 1954, p.261, is attributed by informants to the circumstances of their defeat by the Kho, especially to the loss of their ruling and upper classes, with whom died much of the rationale of Kalash organization and belief.

countless and officials drawn from an aristocracy, some of whom, like
the ruling families themselves, were of foreign origin. The states
were largely autonomous and self-supporting, and they were generally
in a state of temporary alliance or hostility with each other. Of
these the most westerly, centred upon the lower Chitral valley, was
the largest in relation and the most important during the 14th
century.

In the early 19th century, the southern half of the Chitral valley
was ruled by Mehtars of the Katore dynasty, claiming descent from Timur
Langj. Their territory extended south from the neighbourhood of Daramia,
village on both sides of the main river, as far as the Kasurai pass and
up to the watershed between the Chitral and Kashgal valleys stopping
short of Narsat. (See map opposite.) To west and north, the tribu-
tary valleys of Lutkoh, Malikho, Turikho and Jerich, and the western
bank of the Chitral river south of its confluence with the Malikho
tributary were all Katore territory.\(^4\) The great bulk of the popu-
lation were Kho, in the south there were also Kalash, Gijara and
Panguriks, and in Lutkoh were the Yidgha who had 'adopted the ways'.
The Katore Mehtars also exerted influence, to greater or lesser extent,
in Kashgal, Narsat, Cawri Kohistan and Dir Kohistan.

There was no rule of succession. At the death of a Mehtar his son
and other male relatives entered a struggle for power, and there was conse-
quently periodic conflict among the ruling class. Nevertheless centralised
rule appears to have been well-established in the Chitral valley for many
centuries, and the Katore appear to have been effective keepers of the peace.

\(^4\) Except for the longest and most important, valleys are generally
known just by the name of the river that flows there; thus the
valley of the Turikho tributary is known as Turikho, and similarly
Kapar, Terich, Yair, Yandia etc. Alternatively, the upper, lower
or some other part of a main valley may have a name, e.g. Yarish,
Baroghil, Gujbal, Min. Valleys and areas of this order of size,
(which under the Katore might have been administered by 'provincial
governors', but which afterwards might have constituted an autonomous
political unit, and which might now support a population of up to
20,000,) are loosely designated as 'districts', and are referred to
by their proper names. See map 2, opp. p. 5
within their boundaries. Many early writers testified to the "settled state of affairs", and commented upon the presence of defensive structures only in the border villages. The 19th century produced the remarkable Katora Mehtar Aman-ul-Mulk, who held the throne from 1857 until 1892, and whose firm despotic rule appears to have consolidated the stability of the state, and enabled him to remain independent of Afghanistan and Kashmir.

The Katora came under the aegis of British-India in 1895, following the disorders which resulted from Aman-ul-Mulk's death. An additional political agent was appointed in an advisory capacity, but the state remained sovereign. Aman-ul-Mulk had extended his influence to parts of the Nashaqote territory in the upper Chitral valley, and in 1914 the province of Hazu, then comprising Aaspur, Yarkhan and Barchil, was added to the Katora territory to form Chitral, by which name the expanded state has become generally known. A border agreement with Afghanistan had already determined the extent of Chitral's territory to the west and south. Much later, at the time of partition, the Mehtar waived his claim to Waziristan in favour of the Wali of Swat.

The boundaries of present-day Chitral have remained unchanged.

In 1947 the Mehtar acceded to Pakistan. In 1953, at the accession to the throne of a minor, an interim Constitution Act was passed, by which the Mehtar remains Head of State, and the Chief Nazir, whose powers are vested in the additional political agent, is responsible for the...
administration of the state and for the control of finances. The state receives financial assistance from the Central Government of Pakistan, and the provision of certain services and the maintenance of communications is becoming increasingly the responsibility of the Pakistan Government.

The composition of the population has remained largely unchanged. Lamn and Karimn are also inhabited by the Afghan 1395 border arrangement Arak, and Kama, inhabited by non-Afghan groups, became permanently included in Chitral, and some additional groups of immigrants are now represented in small numbers, e.g., the Bhashgali, the Dobhi at Baroghil and Pathan entrepreneurs. The total population in 1961 was 113,057. The addition of Karimn and Lamn made Chitral the largest state in the region, in terms of population and of area.

In the first part of the 19th century, the north-eastern parts of Chitral as far south as the village of Arak, the upper Gilgit valley above its confluence with the Karanbar river, and Ishkoman and Ramin comprised a state ruled by the Aushwaqte dynasty, a collateral branch of the Astore. The Aushwaqte had, for the most part, been under the influence of the Astore, but in the early 19th century their dynasty also produced a remarkable ruler, Gohar Aman, the nature and consequence of whose 'restless ambitions Aushwaqte temper' have been recorded. Gohar Aman ruled intermittently from 1829 to 1850, and his chief objective during most of this period was territorial expansion, especially in the Gilgit valley. To the intermittent warfare, which was more or less continuous during his lifetime, is attributed much loss of life and the depopulation of large tracts of the Gilgit valley and Ishkoman, the enslavement of a great part of the population of Gilgit, and the almost

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50 Nurul Islam Mian, 1956, p.53.
51 'Chitral' is used of the present state and its territorial extent. To indicate the smaller area traditionally under Astore rule, 'Astore territory' will be used.
52 Schomburg, 1934, pp.257.
53 E.g., Irev, 1875, pp.436-444; Biddulph, 1890, pp.123-9; Schomburg, 1934, pp.257-58.
54 Biddulph, 1890, pp.12, 135-9; Gurand, 1900, p.212.
The continuous absence of any effective government in most of the Gilgit Valley. After his death Shauwante fortunes declined. Yasin was taken by the army of Kashtiuzmar in 1963, and perhaps a third of the inhabitants were put to death. 39 Apart from generating insecurity and uncertainty, which persisted into the 20th century in the Gilgit Valley, events of this kind continue to be reflected in the varying pressures of populations upon cultivated land. 40

There followed a succession of Shauwante rulers, but Asan-ul-Mulk's influence grew, and by the time of his death in 1892, Yasin and Yarkhan were being administered by Katore governors, both of whom perished in the struggle for the Katore throne. After British-Indian influence became paramount in the upper Gilgit valley and Chitral in 1895, governors were appointed from among the ruling families of the region to Laspur, Yarkhan, Yasin and Khar, and Ishkoman. The territories were subsequently redistributed in 1911 and 1914, leaving the three political districts, (as they are officially known) of Yasin, Qupis (i.e. Khar with Chitral), and Ishkoman. These remain the administrative units at the present time. The governors are responsible to the Political Agent at Gilgit town for internal administration and the adjudication of most internal disputes, and are permitted to collect revenue, of which they keep a part. Their posts are not hereditary.

The populations of Laspur, Yarkhan and the Thir district are Indo. The population of Yasin is largely Yeshkum, there are also Shina and Doms. Upper Ishkoman is inhabited by Nokhi who fled with their ruler in 1533. 42 At that time, Ishkoman was unsettled due to Jehar Isani's depredations, except for a colony of Shina in the south. 43 of 1945

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40 See also Stein, 1920, I, p. 39 and n. 4. O. C. Clarks, "The Rhu and Khandur Passes", Res., Iii, (1931), p. 93-
42 Schoenber, 1935, pp. 204-9.
43 Tom Longstaff, This My Voyage, London, 1970, p. 207.
there were more than 800 kasqui, and a number of other groups have also settled in Iskakman - the, Shina, b. e. m. and Kashiari. In 1961 the populations of the political districts were as follows:
Kash 12,113; Upper 11,303; Iskakman 6,110. 51

The population of the principality of Rupial in the lower Gilgit valley is predominantly Yasin, with Shina minorities. Rupial's territory stretches on both sides of the Gilgit river from Gilgit to Soper inclusive. The ruling family, the Rupial, are a cadet branch of the Katoor, but there has been little contact between the families, while the Kashiari were particularly hostile to the Rupial. 62 Rupial rule appears to have been stable, but the state was liable to incursions from both Yasin and Gilgit. It played little active part in the disturbances of the 19th century, and as early as 1842 the Rupial accepted the suzerainty of Kashmir.

The present status of Rupial is not clear. The Rupial remained as hereditary ruler, and continued to be responsible for all internal administration, but foreign affairs, defence and communications became the business of the suzerain power. In addition, however, it is stated that Rupial was 'Kashmir territory', and a distinction was drawn between this situation and the 'suzerainty of Kashmir'. The relationship has not been inherited by Pakistan. At present, Rupial is designated as a political district, but the Rupial retain his hereditary rights, and Rupial's status may be more like that of Chitral. In 1961 the population of Rupial was 11,790.

50 L. Lorimer, 1909, p.4-9. He also mentions a small kaschi colony at Sirkot in northern Yasin.
51 Where the 'Kashiari territories' are referred to, this indicates the districts formerly under their control, i.e. Yasin, Lamur, Kashiari, Upper, Yasin and Iskakman.
52 Schoenborn, 1935, p.258.
53 Irob, 1679, p.437.
The principality of Gilgit was centred on Gilgit town and had been the most important state in the eastern part of the region, but the early 19th century was a period of upheaval and dynastic change there, and not only as a result of the depredations of Sohail Khan. In the twenty or thirty years before 1842, there were 5 dynastic revolutions in Gilgit, and during this period it has been reported that the population fell from 7,000 households to 2,000 only. Following an invasion by Sohail Khan in 1841, the Sikhs, then ruling Kasbkhur, were invited to intervene, which they did, occupying Gilgit in 1842. They and their successors, the Dogras, were driven out by Sohail Khan in 1843 and again in 1842, but after his death they recaptured Gilgit in 1865, garrisoned the town, and retained control until 1947. The Gilgit was deprived of its powers and a Kasbkhur governor appointed to administer Gilgit and to manage relations with the neighboring communities. Kasbkhur rule after 1865 provided Gilgit and Astore with a stable government and law and order for the first time for more than two generations.

From 1865, a British Political Agent was appointed at Gilgit town to administer what became the Gilgit Agency, and there were varying lease arrangements and divided responsibilities for Gilgit and the Agency between British-India and Kasbkhur. In 1893, Gilgit was 'settled' according to British-Indian practice. In 1947, full control of the Gilgit Agency was returned by the British-Indian Government to Kasbkhur. The population of Gilgit quietly revolted and acceded to Pakistan, together with the other communities of the Agency. The administration has since been under the control of the Ministry of Kasbkhur Affairs at Rawalpindi, but no important change has been made in the internal organization of the Agency or in the status of any of its components.

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65 Nawa, 1875, p.436.
67 During most of the period 1895-1947, the Gilgit Agency comprised Gilgit itself, the Political Districts including Hunza, and the communities of the Anza and Astore valleys and of the Indus Valley from the Baltistan border to the confluence of the Shandar and Tor tributaries.
68 With the exception that its boundary in the Indus Valley was extended westward in 1932, it now adjoins the territory of what state on the right bank.
The traditional title of the rulers is Khan, and this was used in the early literature, but in the 20th century they have become known outside their states as Mir. By some genealogies the Mirs are descended from Alexander the Great, and by others from the former Imam Zaman of Gilgit.
The main part of Hunza is on the right bank of the Hunza river, and it is in the east-west section of the valley, from Hindu to Gilgit, that the oldest element of the population, the Arungha, live. In the upper part of the valley, i.e. Gijhal, the territory on both sides of the river is included in Hunza. The main valley there and the Chapursan and Shigar tributaries are inhabited by Wakhis who immigrated in the 10th or early 11th century. On the Nagar side, the lower Hispar valley and the left bank of the Hunza river down to Nashot is occupied by Arungha. From Minapin downwards, the inhabitants are Shina, and the village of Chalt, on the right bank, with the valleys of Ar and Chaprot, are also Nagar territory and occupied by Shina. The nearby Hunza border villages of Maun and Hindi are also Shina. Minapin and Hindi thus represent the upper limit of Shina expansion in the Hunza valley. In both states there are also small settlements of Bura.

Hunza, with access to the north, was more liable to Turkestan and Chinese influences, while Nagar, with a route to Gilgit, was more concerned with affairs there. There was also considerable contact between Nagar and Baltistan via the Hispar pass, but glacial changes have gradually terminated this, and after the Sikh conquest of Baltistan traffic ceased. From 1847 the two of Hunza paid allegiance to the Chinese government of Eastern Turkestan, receiving an annual subsidy and ceremonial gifts, and both Hunza and Nagar accepted Kashmir suzerainty in 1867-8, and exchanged 'tribute' for subsidies accordingly. Both allegiances appear to have been nominal, and it was the boast of both states that they had never been taken by force. The events which led up to the campaign by the British-Indian Government in 1892 are described by Alder; they

70 Sorant, 1936, p.20; E. Lorimer, 1907, p.17. The Chapursan valley was formerly inhabited by Khirghis also, but they were confined to the Eastern Turkestan side of the border at the end of the 19th century; Schorasberg, 1933, p.295. Gijhal was at one time a separate Wakhin state. See also Schorasberg, 1933, p.215.

71 Durand, 1869, p.162; Schorasberg, 1937, p.141.

72 Siddall, 1880, p.23.


mostly arose from the imperial rivalry with Russia, but there was the additional objective of preventing further raids by Hunza on the trade caravans passing between Ladakh and Eastern Turkestan. After the campaign, the states remained largely independent, and their ruling families remained in power, with full control over internal affairs. Defence, communications and external relations were supervised from Gilgit town as for other parts of the Agency. These arrangements have been continued. The population of Hunza in 1961 was 21,231 and that of Nagar 17,623.

More than half of the present population of the region are the inheritors of these varying traditions of autocratic government. Such traditions continue to have important implications for the agriculture of the northern part of the region.75

The Southern Achenaloon Communities in the 17th and 20th centuries

Although few of the early writers visited the south of the region because of the 'unsettled state of affairs' there, they did not neglect to describe its characteristic form of government. Arew and Sidculph both named the four major tribal communities which, together with several smaller ones, form the population of the area known as Shinaki.76 Shinaki, "the land of the Shina", where the Shina are in material and political preponderance, extends down the Indus Valley from the Gilgit border at Jaglot, nearly as far as the Bandia confluence on the right bank, and as far as theFalas valley on the left bank.77

The four major Shinaki communities are for, on the right bank of the Indus south of the Sai Valley; Chilas, on the left bank below Astar,

75 For the purposes of this dissertation, the states of Chitral, Hunza and Nagar, the Sub-divisions of Gilgit and Astar, and Jamial and the other Political Districts are referred to collectively as the principalities. The names Gilgit, Astar, Nagar, Yasin, Ishkoman, Cupla and Chitral are used of the districts known by those names. Where their eponymous settlements are meant, this will be indicated.

76 Arew, 1675, pp.49-61; Sidculph, 1690, pp.3-15.

77 Anon., 1934, p.307. Although the Falas valley is included in Shinaki and in Kardistan, it is not included in the present study. See Map 2 e.g. p.5.
centred about the village of Chilas, and including the Chit, Chak and Imer valleys up to the Raghun and Ishanganga watersheds; Tarai, on the right bank, whose northern limit is the Indus—Gilgit river watershed (i.e. the southern border of Balial); and, west of Tarai, the community of Langir, whose territory comprises the valley of that name. Further to the west, on the right bank, is the Hardsa valley, dominated by Kohistanis. Hardsa and Chilas are the most southerly of the districts studied. Crew and Riddulph also mentioned smaller Chinaki communities located in smaller valleys between the four major ones; these were generally in a subordinate position and allied to one or other of the four.

They described the administration of all these communities as "republican", because there were no centralized administrations or autocratic chiefs, but assemblies of representatives of the inhabitants, whose function was to settle disputes and make communal decisions. The assemblies were known as jirgas, and were regularly and formally convened at different levels, e.g. for a village, a group of villages, or a whole community. A seat in a jirga was associated with personal influence and status. There were no formal rewards, and since there was no local administrative expenditure, there was no internal taxation among these communities.

Although the Chins are in numerical majority in most of the Chinaki communities, Yoshikans are also present, and in Tarai they form an important element in the population.²⁹ Yoshikans and Pas are found in small numbers throughout, and in Langir and Chilas there are Mular and Kohistanis immigrants who are employed as agricultural labourers. Mulars have lived, during the past century, been hiring pastures and occasionally cultivating in the southern valleys.

Little is known of the history of these communities. Tarai was at one time a centre of Buddhism²⁹, and at one time a princely state. Chilas was also a princely state, but little is known of the circumstances.

²⁹ Riddulph, 1930, p.34; Stein, 1925, I, p.40.
²⁹ Stein, 1925, I, pp.20-1.
Chilas and Gor have at times paid a vague allegiance to the state of Gilgit, while Larel has sometimes been allied to the Ashmains, and has traditionally paid for the use of pastures on the dupi side of the watershed. During the 19th century, Larel, Chilas and some of the smaller communities were attacked by the Kashmir army and subsequently paid tribute, but it was not until 1892-3, when unrest in Shinaki threatened the security and supply routes of the garrison at Gilgit town that Chilas was annexed. Together with Gor and some smaller communities, it was permanently added to the Gilgit Agency. Since that time, nominal taxes have been levied in Chilas and in some other districts, and an Assistant Political Agent has been stationed at Chilas village to arbitrate major disputes and supervise law and order. Jirgas continued to settle local affairs and to have advisory functions, although they have gradually lost authority to the Agency administration. Chilas and Gor, together with some smaller communities are now parts of Chilas Sub-Agency; in 1961 their combined populations were 12,312. Larel and Tangir continued independent until 1958; they acceded directly to Pakistan. They have now been added to the Sub-Agency, and a Political Officer deputed to them. The population of Larel in 1961 was 20,199; that of Tangir 7,542.

Like Larel and Tangir, Kohistan was far enough from the borders of British-India and from the garrison supply routes for it to be left independent through the 19th and early 20th centuries. It was only after the emergence, between 1919 and 1926, of Swat as a centrally-governed state that Kohistan became the objective of territorial expansion. Today, Kohistan consists of three major communities which have had tribal forms of government similar to those of Shinaki.

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31Earth calls this form of government 'acaphalous' and this is adopted in the present dissertation. Earth, 1956a, p.77 and passim. 'Acaphalous communities' refers specifically to the communities of Gor, Chilas, Larel, Tangir, Mandie and the Gauri, where athenymous villages are meant, this will be indicated.
The communities are small, intermingled, so closely that only a few could be included in the present study. The majority of the inhabitants are Pathan and there are also Indo-Scandinavian elements of purely white, and others.

Little is known of the early political history, but there are clear evidences of structural role there. In 1890, King Porin was under A. W. Bracken’s administration, and under him became a part of the British state, administered by an Indian district officer according to the British pattern. The Pathans appear to have lost much of their authority, the population of Darel in 1941 was 9,579.

The Pathans, who occupy the northern part of the Chitral zone, constitute another acrophalous community. Their southern neighbours, the Swat, were completely incorporated into the Swat state in 1922, but the Pathans remained independent until 1947, at which time the claim of Chitral was revived on the district occupied by the Swat. Its formal status remains tribal territory, the administration of which is entrusted by the Pakistan Government to the war of Swat. The town is divided between the three main settlement localities of Salar, Baha, and Utrat. At Utrat, adjacent to Baha, there is also a group of the who migrated from Turkestan nine generations ago. At higher altitudes above Utrat, and between Baha and the Darel district, there are permanent settlements ofруга. Other rugas migrate with their animals to Darel in the summer, but return to southern Swat in winter. The population of Darel in 1941 was 10,906.

The traditional organization of the small non-mono-communities of southern Chitral—the unifying, inter-relating and acrophalous—was also acrophalous, at least until inter-state influence prevailed there at the end of the 19th century. The organization of the Pathans was also acrophalous, but rather more formalized than in which I was concerned.

So far as the early writers were concerned, the outstanding features of the acrophalous communities were their independence, their internal feuds, and their xenophobic attitudes towards others. men, with his usual
The Agricultural Settlement

By the 19th century, agricultural and economic history of the region shows details of how local populations were either smaller or larger than at present, and that they have been growing rapidly during the present century.

One set of factors that contribute to this trend is the increasing demand for agricultural products. As the population grows, so does the need for food and other resources. This, in turn, leads to an expansion of agricultural land and settlement.

Another factor is the technological advancement in agriculture. Improvements in farming techniques and machinery have allowed farmers to increase their productivity, leading to a higher yield per unit area. This has been particularly evident in the last century, where the introduction of new crops and farming methods has had a significant impact on the agricultural sector.

The combination of these factors has led to a rapid growth in the agricultural sector, as well as in the rural population. The trend is expected to continue in the future, with further investments in agriculture and rural development initiatives.
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</table>

86 **Frontier and Overseas Expeditions, 1907, I, p. 30;**
Census 1921. XX, Part II, p. 220;
Census 1931, XXV, Part II, p. 232;
Census 1931. XXIV, Part II, p. 3061;
Census 1941. XXIII, Part III, p. 3153;
Census of Pakistan 1951. IV, "North-West Frontier Province", Report and tables, p. 392-1;
Unpublished data provided at the Ministry of Kashmir Affairs, Rawalpindi.

1921 figures for Azad and Gilgit separately were not published.
<table>
<thead>
<tr>
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<th>1899</th>
<th>1911</th>
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<td>(excluding</td>
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<td>Pabul and Tangir</td>
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<td>Meraj</td>
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<td>Tangir</td>
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</tbody>
</table>
Shina

35,000 - 40,000

Shina

Bidish, 1830, p.34ff.

Kashmiri

63,000 - 66,000

Kashmir (and Kashmiri)

Bidish, 1830, p.34ff.

Doma

(= Ustidan
= Dericho)

Most or dominant local
language.

D. Xenner, 1939, pp.5-6.

300,000

Moor

Morgenstern, 1932, pp.46-50.

Kalash

1,000 - 2,000

Kalash

Morgenstern, 1932, pp.47-51.

Kashmiri

Regional distribution, and origin or former distribution.

Indus Valley and tributaries north-west and west
Janga Parbat, where they form the majority of the
population, and in the Askar valley, lower Gilgit and
lower valleys. Also to the Indus valley south of
region studied.

Appears to have migrated northwards via the Indus
valleys of the Indus, especially on the right bar
above Indus Pakistan.

Probably descended from a former Hunza tribe,
population which occupied the eastern part of the
region before the Hun expansion.

In small numbers in the Him occupied areas.

In small numbers in most parts of the region.

Represent the Doma of the north of West Pakistan
north-west India.

Chitralt Valley (from Chitral to fresh) and its
tributaries, especially Ural, Hulchow, Tericho,
Kashmir, and Batin valleys. Also form the majority
of the population at the head of the Gilgit valley.

Migrated from the north, and were already establ.
in the upper Chitralt valley by the 7th century.
Subsequently displaced the Salar in the lower part
of the valley.

Hunzair, Sarir and Kumbor valleys.

Come from the south or west. Formerly occupied the
lower Chitralt valley as far north as Askar, but
were displaced by the Kho. Practise the Kalash
religion, but converts to Islam become assimilated
into the Kho population, and differ in respect of
language only.
Regional distribution, and origin or former distribution.

The southern branch of the Jutum valley.
Immigrants from Minjan. They are now largely assimilated in the one population, and differ only in respect of language.

Central stretch of the Kunza valley, on both banks, and in the Limpar valley.
Of unknown antecedents, but may be descended from the same Minjawi-speaking population as the Yeshians.

Chitril and Gilgit valleys and tributarries, also the Kunza valleys. Scattered in small numbers.

Of various foreign origins, mostly from Turkestan, Badakhshan and Iran.

In the valleys of the Gah, and Shar rivers, and at their confluence.
May have formerly occupied part of main Swat valley and were driven out by the Yeshian Pathans.

Kandia valley. (The Kehistanis or 'Kandis are known as 'Kandiawals'.) Kehistel (~dialect) speakers also inhabit the Huber valley, which is south of the region studied. Their total number is probably 15,000 - 20,000. (See no below.)
May have been driven out of areas further south by Pathans.

In the Marsat--Arhan locality.
May have flown from Khasan invasion of Bajaur in the 15th century.

Pass Masar valley.
May have flown from Swat in the 15th century.

Ashrat, lower Shanai and Boci valleys.
Are of Chin ancestry, but have been settled in the present localities for many generations.
Enumerated census figures have been collected for some districts since the beginning of the present century, but elsewhere there was no census until 1951 or 1961. Even earlier enumeration is officially reckoned to have been incomplete, and even the more recent census operations have been criticized for inadequacy and inconsistence. 67

Though limited in reliability, the data which is available, (and which is set out in table 1 opposite), indicates that in both Chitral and the Gilgit Agency (excluding Areal and Upper) the population has approximately doubled in 70 years. Some small part of this increase may represent improved enumeration, and some represents immobilization of a few thousand women, bachelor and Bashgali and the presence of government personnel from other parts of Pakistan, but most of it is actual growth in the size of the already existing population.

Little is known of the relationship in former centuries between the sizes of local populations and the areas of cultivated land that supported them. It is likely that the cultivated area of each district expanded or contracted as the size of population fell. The difficulties and costs of transport prevented any large-scale or extensive movement of foodstuffs from one locality to another, and the evidence of informants and of early travellers is of a strong traditional tendency towards self-sufficiency at all levels of economic organization - household, village, locality and district. The earliest reference to the agricultural situation in any part of the region records the absence of any surplus of foodstuffs in the Gilgit valley in the 6th century. At that time, no again more than 1,000 years later, it was necessary to import supplies from Kashmir for a foreign military garrison. 69

With the establishment of garrisons in 'stam and Gilgit, the Kasmir and British-Indian authorities were faced with the problems of ensuring supplies for them, and this led to endless debate, uncertainty and calculation about the extent to which the grain required might be procured locally. As by 1910 however it was clear that many local populations were

68 Stein, 1922, i, pp.27-; Stein, 1923, i, pp.3, 16-7.
growing as fast as production was being expanded, and that in some districts, e.g. Altyn, Huzna and Jaligut, the growth of population threatened even to outstrip the food supply. With the improvement of roads, some small surpluses appeared, but most of these have been absorbed locally or by the growing deficiencies in neighbouring districts.

Official personnel stationed in the region have continued to be supplied from outside, but there now appears to be the beginning of an overall regional deficiency in grain, since some part of the grain imports is being consumed by permanent inhabitants. In part however, the amount concerned represents only a minute proportion of the total annual production of the region, and the agriculture remains 'subsistence-orientated' and organised for self-sufficiency.

The farming is mostly in the hands of owner-cultivators who have proprietary rights to irrigated holdings, although all within one village, and which usually vary between 1 and 5 acres in total area. There is a class of landless agricultural labourers, especially numerous in the south. There is also a class of non-cultivating owners, some of whose holdings may exceed 100 acres. To this latter class belong members of the ruling families and aristocracy of the principalities.

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Farmer' is used for those owners of land who perform some or all of the cultivation of it with their own hands, who make all the agricultural decisions which concern it, and who provide the additional resources needed — animal power, implements and seed.

'Labourer' is used of those who are employed on land owned by others, and who have no part in making decisions or in providing additional resources.

'Tenant' is used of those who have temporary or semi-permanent partial usufructory rights over land which is not their own, who pay for its use, and who make their own decisions and provide their own resources. They normally work the land of absentee owners, possibly in addition to land of their own, in which case they are both tenant and farmer.

'Landlord' is used of owners who do not cultivate with their own hands, who may or may not be locally resident, and who often do not control the operations on their land. They may employ a steward to supervise labourers (and then provide the additional resources), or may rent their land to tenants.

'Cultivator' is used of those who cultivate land which may or may not belong to them, but over which they have at least temporary usufructory rights, and for which they provide the resources and make the decisions. It thus includes farmers and tenants and represents the great majority of the population of the region.
Yields are usually small — a quarter or a sixth of an acre — this is partly a result of inheritance fragmentation, but also a function of levelling, terracing and watering requirements. In the south of Chitral and in Kandir there are small areas of rain-fed cultivation which appear to be an ancient feature, rather than a current attempt to increase the cultivated area. The areas are small, they are only sown occasionally when spring rains make for favourable conditions, and yields are low. Their economic significance has already been discounted.

The main crops are cereals — wheat, maize, barley, millets, rice and buckwheat, of which wheat and maize are the most important. In the north of the region, at altitudes where two crops can be grown annually, wheat or barley is often followed by maize. In Gilgit and Astor, during recent decades, wheat has been grown as a spring crop on 50 — 60% of the total cultivated area available for double-cropping, while maize has occupied a similar proportion of the land in the valley. Cereals are grown mainly to provide flour which is cooked in a variety of ways, chiefly to make breads. The crops have differing maturities, water and seasonal requirements, produce yields of different magnitudes, and are preferred for flour in different orders in the various districts of the region.

Most of these crops have been known in Pakistan for many centuries. The Plang Annals of the 11th century mention rice, wheat, millet and beans as growing in Chitral, but it appears that maize is more recent,

93. By Nies, 1953, p. 293.
94. There are many local varieties of these grains, each suitable for particular altitudes, soils, etc. The millets are of both spadix and panicle varieties. Buckwheat (Fagopyrum) is not a cereal, but its seed yields flour. There are two varieties, commonly known as 'sweet' and 'bitter'.
95. Thakur Singh, 1917, p. 141; data provided at Gilgit railway office.
96. The variety in diets and in ways of preparing food is considerably greater in the principalities. See also Ahmad Ali Khan, 1934, p. 3; Jettmar, 1930, p. 127.
98. Stein, 1921, 1, p. 31.
having spread from the south into the region, and largely replaced the
millets. In upper Kualil the latter part of this process has taken
place within living memory, although by the 19th c. maize crops to have
been well-established in most localities. In the Himalayas neither they nor the paddy rice are
seldom cultivated by the Nepalese, and neither they nor the "ashgali" grown rice. Rice is
grown in areas above 6,000'. In Kalsi it occupies 5 - 3, as on the double-
crop land. Some field-pulses have been grown from the earliest times,
and others are cultivated in small vegetable plots.

Other vegetables include tomatoes, potatoes, pumpkins, cucumbers,
turms, local green vegetables, and herbs. In many vegetable plots
tobacco is also found, and in some northern villages "chara" and
opium poppies are also grown. Here is considerable variety in vege-
table cultivation; on the whole it is given little attention in the
accephalous communities. Potatoes are a recent introduction of 2 - 4
generations ago. They are grown as a field crop in Tamuza and a few
other localities. Cotton was occasionally grown in the past, but is
seldom found now.

At suitable altitudes, i.e. at least as high as 6,000', almost
every landowner plants fruit-trees around his house and along the
edges of his fields. In some districts fruit and nuts may form an
important part of the diet, especially where fruit is dried for the
winter. The most widely-grown fruits are mulberries, apricots, walnuts
and grapes, but there are many others, some of them more recent
introductions. In general, more attention is given to horticulture in
the principalities. In villages at higher altitudes where fruit-trees
do not flourish, and especially in localities where natural timber is
scarce, poplars and willows are commonly planted along irrigation canals
to provide wood for construction and fuel and foliage for fodder. With
the partial exception of "charas", no crop or fruit is raised specifically
for the market.

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96 Engelbrecht, 1914, cited by Peat, 19-3, p.106; Peter Sny, Die Ernten
Pflanzen der künschaft und sozialen Arbeit, 1945, p.334
100 See also Robertson, 1936, p.548; Sny, 1954, p.525
101 Species of Vicia, Lens, Trapa, and Vicia.
102 'Chara' is used in the region of both the plant, (Cannabis Indica)
and of the drug prepared from it.

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Almost every farmer owns a small number (one to four) of cows and bulls, and a flock of 10–100 goats and sheep. Landlords may own flocks of up to 300; even landless labourers usually own a single cow or two. Some farmers also have donkeys and horses. In the south buffaloes are kept in a few places, especially by the Gujars, and in the northern districts, especially associated with the Wakhi, are yaks and occasional fat-tailed sheep. Cattle, goats, and sheep provide milk and dairy products, and wool, hair, hides and meat, although slaughter for meat is infrequent. The maintenance of livestock has been particularly subject to a variety of non-economic influences.

Agricultural methods are largely traditional and labour-intensive. Animal- and non-power is used for all operations (see photographs, opposite and implements are of metal or wood, with no moving parts. Animal manure is seldom burnt, but is spread over the fields, while fuel is usually obtained by cutting trees on the mountains. The mountains also provide grass and herbs in some localities, but these are not important supplements to agricultural production. More important is the vegetation which provides pasture and fodder for domestic animals. Even snow prevents grazing in the winter, animals are stall-fed.

Regional crop yields appear to be higher than the average for West Pakistan (see Table 5 below): this can be explained in terms of higher inputs per unit area, of manure, irrigation water and labour.

<table>
<thead>
<tr>
<th>Crops per acre</th>
<th>Return on Seed</th>
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<tr>
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<td>The Region</td>
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<tr>
<td>Wheat</td>
<td>16–20</td>
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<tr>
<td>Barley</td>
<td>20–24</td>
</tr>
<tr>
<td>Maize</td>
<td>20–30</td>
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Table 5: Average crop yields for the region compared with those for the whole of West Pakistan and for India.

103 Based on data collected in the region and on information from Israer-ud-Din (privately communicated). Scott, 1937, p.18 gives figures for crop yield which are clearly exaggerated. See also Talbot, 1916, p.10; Sahir Sin 1917, pp.70ff., 143.


105 See also Schonberg, 1935, p.43; F.C. Lorimer, "Peasant Life in Rishn", Geographical Magazine, III, No. 4, (Aug. 1935), p.242; (references hereafter to this article will be cited Lorimer, 1936).

106 Alexander Cunningham, Laddakh, Physical, Statistical, and Historical; with notice of the Surrounding Countries, London, 1924, p.224;
The Household

The basic economic unit of the region is the household, which normally contains an elementary family of 4–7 members. It is reported in the literature that high rates of infant mortality limit the size of families. A very few families are polygamous, and occasionally brothers continue to operate a joint household after the death of their father—this is regarded as ethically desirable. At the beginning of the century households were generally larger, partly because more brothers used to maintain joint households, and partly because in some principalities the unit of taxation was the household, irrespective of its size.

Families are patrilineal; the senior man making all agricultural decisions and having the dominant influence on most other economic decisions. Sons, when adult and married, may claim some part of their share of the patrimony and may be permitted to set up a separate household. When the father becomes senile, decisions are taken by the eldest son in an undivided family or by the elder of the sons remaining in a divided family. The youngest son, whether married or not, usually remains in the parents' household, and in many parts of the region it is the youngest son who inherits the house on the death of the father. Inheritance of land is traditionally through the male line only; some receiving equal shares. Daughters receive movable property on their marriage, and are entitled to support from their brothers or nearest relatives when unmarried or widowed.

Women are, in all parts of Kailash, concerned with domestic tasks; they also assist with some agricultural operations, but to varying extents among different communities.

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108 This is reported to account for the larger household of some Kailash villages, where conservation in this respect may result in households of up to 40 members. Nonetheless, increasing incomes from non-agricultural sources, increasing non-agriculture expenditure, and more clearly defined personal ownership of resources and goods, have contributed to the decline of joint households. It is also possible that increasing attention to the exclusion of women encourages smaller households.
During the 18th and 19th centuries, in most districts, houses were built in compact enclaves for defence, often within a fortified wall or in the proximity of a fort. With the establishment of an external administration throughout the region there has been a tendency for farmers to build new houses on their own land, which is said to make for more efficient cultivation, to be more sanitary, and to reduce the incidence of intrigue. This dispersion process has proceeded to different extents in different parts of the region—farthest in Chitral, where conditions have been settled longest, and least in Bareil and Gmr.

Houses vary considerably in construction and style, each group following traditional patterns and methods. Houses consist essentially of a main room organized about a central fireplace. The presence or absence of smoke-holes is another indication of the state of law and order—they are often absent or very small in Chiniki, Fehistan and southernmost Chitral. Store-rooms and cattle-sheds may be adjacent or beneath the main living quarters, or may be detached altogether, depending upon the state of security, the local arrangements for stall-feeding and other considerations. In the south, where wood is plentiful, it is extensively used in building. (See photographs 3, 7 opp. pp. 15, 58.) In much of the north, stone is the chief material, and wood is used only for pillars and beams. Mud bricks and plastering are used in a few localities. Houses vary in grandeur from the simple hut of aijari to the elaborate 2- or 3-storied buildings of the Bashahi and the formalized plan of the kh house.

Styles in houses provide a conspicuous indication of diversity among the inhabitants of Fehistan; yet in many respects their material culture is uniform. This combination of unity and diversity is characteristic of much of human organization there.

The environment and the possibilities for agriculture make for natural center of settlement, often clearly bounded, and capable of

supporting small populations the scale of whose contacts with their
neighbours is restricted by the physical obstacles between them.
That communities have been linked more often by ideas and techniques
than by trade and travel can be understood when they are seen in
relation to their environment.

The basic uniformity of agriculture is especially conspicuous.
Groups and communities have applied the same general methods but with
differing degrees of necessity and differing degrees of success.
Observers have commented upon the high degree of development of agricu-
tural techniques in some districts and upon the close adaptation
to natural circumstances. 112

112 E.G. Faffen et al., 1956, p.30.
CHAPTER 4

FORMS OF GOVERNMENT

PRINCIPALITIES AND AGRICULTURAL ECONOMIES

i Changes in the Form of Government

ii Centralized Government: the Matore Administration

iii The Administrations of the other Principalities in the 19th and 20th Centuries

iv Acephalous Organization

A consideration of some features of the traditional political systems and the associated institutions is important for an understanding of much of present-day agricultural organization and economic activity, and in particular for an understanding of the divergent rights of individuals to the most important economic resource - irrigated land.

Changes in the Form of Government

That certain social and economic developments tend to be associated with the evolution of a centralized government has been observed elsewhere, and there are even traditions extant in some of the districts of Badistan now centrally governed, which record something of the progress of such an evolution from an earlier 'tribal' organization. Schapera has mentioned additional features important for economic activity, which may be associated with the establishment of centralized government, and most of which are present in the principalities of Badistan. Among these are a system of social classes, with some degree of social mobility, and the absorption of foreigners (who have often brought special skills); the imposition of law, order and adjudication; the organization of co-operative enterprise; the imposition of taxes; and the provision of services. Such features are absent in the accephalous communities, which are characterized by a social ordering on the basis of caste or of common descent - i.e., degrees of kinship - and a distribution of resources upon the same basis. Foreigners are excluded, and there is little effective provision for law, order or cooperative enterprise.

Although he did not attempt to account for the differences in political organization that he was the first to comment upon, it seems to have been assumed by later writers that particular forms of government are associated with ethnic differences. The British...

...prefer a style of self-government, and endeavor wherever they settle to continue this form of their original government. Similar conceptions are found among the population of the region, though expressed with reference to the contemporary situation. However, so little is known of the ancient history of the major groups that such a suggestion cannot be taken further; nor is it supported by the observations of other writers who have discovered traditions of former centralized rule in several of the present-day aschphalous communities.

Clear traditions of former centralized government are found in Chilas, Darell, Indus Kohistan, and, within living memory, in Tangir, while in Gor and Sawari Kohistan there are at least vague traditions of a former ruler. When centralized government superseded tribal organization, it is usual for tribal and descent organization to break down; the survival and the re-emergence of descent organization in the aschphalous communities therefore appears anomalous. Barta, who has discussed these forms of government and the changes from one to another, especially with reference to Indus Kohistan, has suggested that the former centralized states were organized in such a way that

The structural implications... for the political organization on the descent group level are limited...
Thus where a community reverted to ascephalous organization, perhaps after only a relatively short period of centralized rule - in Tangir the reign of Pakhtun Wali was 12 years - much of the descent organization may have been left more or less intact and functioning, although possibly lacking in 'pattern and structure'.

In discussing the causes of the change, Barth suggests that two factors are apparent, one economic and one strategic. Economically, the different valleys may be classified as a gradient from the larger and more fertile, permitting larger concentration of population and producing some surplus, exemplified by Chitral and Gilgit, to the economically marginal and restricted environments exemplified by the smallest Kohistan valleys. The strategic factor of degree of physical isolation and defensibility is roughly congruent with the economic gradient. It is readily seen, and understood, that the larger, heavily populated valleys, more difficult to defend, form the core of independent centralized states. The more marginal the environment, the greater the strain on a centralized organization - from occasional revolutions in Yasin-Farahan, to severe stresses during the temporary period of centralized rule in Tangir-Takht, and finally to no contemporary cases of centralized rule in the small valleys of Kohistan.11

That the change from a tribal to a centralized government may be associated with a raised level of economic achievement has been observed in other societies12, and this may have been the circumstance in which centralized rule was first established in Pakistan, probably, as Barth suggests, in Chitral and Gilgit13, and also probably in Yasin-Farahan.14 It seems more likely however that the changes in the reverse direction, from centralized to ascephalous organization, i.e. those which remain especially relevant to present-day economic organization, and with which Barth is mainly concerned, were indirectly associated with the particular circumstances of the Islamic conversion, and that in so far as such changes had any consequences for local economies and agricultural productivity, they were accompanied by a decline in output.15

11 Barth, 1956, p.85.
13 Drov, 1875, p.435; Stein, 1921, I, p.27.
14 Stein, 1921, I, pp.41-2.
15 See also Jettmar, 1960, p.134.
An economic gradient, as apparently envisaged, would not depend only upon the size of a valley and the quantity of cultivable land, but also upon the size of its population in relation to the sum of its resources; and the extent to which the population utilizes these. It is suggested below (chapter 3) that even with existing techniques, the resources of the present Kohistan and Shinaki communities could be further exploited. An one feature of the change from centralized to accephalous government, Barth mentions the abandonment of fields and the loss of ancient engineering skill. This in itself is evidence that resources are not being fully utilized, and have, in the past with centralized government, been more fully utilized; it cannot be used to support the argument that such communities do not have centralized government because they cannot produce an agricultural surplus. A surplus is not only to be seen in terms of trading and marketing. Herskovits describes a surplus partly in terms of "... the social leisure which is only afforded those members of the community who are supported by this excess wealth." Although there is no precise data, it is likely that in some of the accephalous communities, the proportion of the population who do not work with their own hands, or do so only very occasionally, has been at least as great as in some of the principalities. All informants familiar with large parts of the region were of the opinion that the south is as favourable for habitation, and area for area, as in no way less endowed with natural resources than the north. It does not seem likely that an economic gradient devised in terms of agricultural resources could be made to correspond with the variation in political organization.

No systematic study of the topography of the region has been made with reference to traditional methods of warfare, but there seems little to support the suggestion that the strategic factor partly accounts for the geographical distribution of the systems of government. Shina and Sagur are both located in what is perhaps the most inaccessible valley.
in the region, while Swat Kohistan, Chilas, Darel and Tangir are no less accessible physically than parts of Chitral or Gilgit. The accounts of travellers make it clear that the feasibility of travel was often determined by the extent to which the local community established and maintained bridges and rafts, and constructed pathways along rock-faces and precipices or, alternatively, deliberately kept approaches to their district in a bad state of repair.\textsuperscript{19} Thus in times of peace and trade, the northern principalities were generally more accessible than the xenophobic communities of the south, but in time of war the most frequented routes could be easily made impassable by destruction of paths and bridges.

Firth goes on to introduce another consideration which may have had more relevance to the changes in political organization.

The degree of cohesion in a centralized organization obviously depends upon innumerable cultural variables. Tradition places the old kings in pagan times, and it seems reasonable to invest them with central magical and ritual functions, as suggested by functions retained by the Mir of Hunza in 1572. The general breakdown and disappearance of kingship in Kohistan is then seen as a result of conversion to Islam, and the consequent loss of centralized ritual and magical institutions, supporting such kingship.\textsuperscript{20}

Similar functions are also retained by the Mir of Bager and were formerly vested in the Mir of Gilgit.\textsuperscript{21} Their survival may have been related to the circumstances of the conversion. In Hunza and Bager at least there are clear traditions that the success of the first missionary followed without conflict upon the acceptance of Islam by the rulers, both of whose dynasties continue to hold the thrones. Elsewhere, in the Chitral and Gilgit valleys, new dynasties were established\textsuperscript{22}, and there was a period of territorial reorganization.\textsuperscript{23} Nevertheless, and whatever the exact sequence of events,

\textsuperscript{19} Vigne, 1844, p.301; Durani, 1900, pp.43, 79; N.I. Vavilov and E.E. Bishin, Agricultural Afghanistan, Leningrad, 1929, p.542; Schomberg, 1935, p.95. The thicker vegetation cover of the south may have made for greater difficulties in establishing law and order there; see Robertson, 1896, p.569ff. For descriptions of Bashkali methods of nabash and warfare.

\textsuperscript{20} Barth, 1956a, pp.35–6.

\textsuperscript{21} Bidulph, 1883, p.104.

\textsuperscript{22} Bidulph, 1900, pp.149–50; Ghal-e Muhammad, 1907, pp.113–4.

\textsuperscript{23} Bidulph, 1880, pp.20–1, 31; Imperial Gazetteer, 1909, XI, p.239. There are traditions in Panderi of a period of secessious organisation which may have also been associated with these changes.
Centralized government continued as the characteristic form of political organization throughout the north of Pakistan.

In the south, on the other hand, the missionaries came from tribal societies. It appears that the former rulers were killed or permanently expelled, and that an anachronous organization was introduced as a concomitant of the new religion; in any event, centralized rule was abolished up to the time of the abortive reign of Pakhtun Wali in Tangir. Jettmar has observed that the Islamic conversion of the south "...brought a big wave of Indian patterns with it." His had important implications for economic organization, especially in respect of the pattern of settlement, the distribution of resources, the division of labour, and the system of tenure of irrigated land.

Centralized Government & the Katora Administration

The institutions and procedures of traditional Katora administration, in addition to being more complex and better preserved than those of other states, are also better documented. An elaborate and effective system of government existed which was able to function in the almost complete absence of currency. Barth has described some of its features:

The whole state was organized through an association of specific duties and responsibilities with particular areas and plots of land. As land was the only source of wealth, all persons could thus be categorized in terms of the duties associated with the particular fields of land that they were utilizing. All land belonged, in the final instance to the Mehtar (literally: "owner"), and the duties associated with any specific piece of land were to be regarded as payment, in service or produce, for temporary usufruct rights to that land.

Thus, in the central village of Chitral, the different bureaucratic officers were given traditionally defined houses and estates in payment for their services - or, one might equally legitimately say: by virtue of occupying a specific estate, the occupier was required to serve in the bureaucracy in a particular capacity. The estates were inherited from father to son, or in lieu of norm by an other ... [male relative] ... the Mehtar ... [was] the ultimate owner of the land [and] he had the right (and often the power) to evict anyone at any time.

25 Bidulph, 1880, pp.20-1; Barth, 1956a, pp.84, 96.
In the rest of the country, tenure was even more firmly associated with patriline, and duties pertained mainly to local administration, the maintenance of travelling officials of the state or the Mehtar himself, labor for the government, or payment of grain to the Mehtar’s household. Each village was administered by a village headman (charghel) and his assistant (chargha), whose responsibility it was to know the duties of each household in the village and who was in charge of seeing that all such tenancy requirements were satisfied. These duties could be wonderfully specific and complex: one field required the payment of no more than one goat and seven chickens to a travelling official no oftener than semi-annually, the next was associated with the duty to keep the Mehtar’s own fields free of crows, the third with catching and training hawks and falcons for the Mehtar, a fourth with one month’s labor per year, etc. Further more, a complex pattern of sub-infandation was developed, whereby each larger estate was again subdivided and leased out as a miniature of the state system, but with duties to the estate-holder and not to the Mehtar.²⁷

Few persons in Chitral now remember or understand how the whole of the traditional system operated. Nevertheless, some additional information was collected which may be added to that given by Barth.

Some land had attached to it certain duties towards the village community or the pursuit of a craft occupation: some individuals had to carry the dead to the graveyard; others had to perform the blacksmith’s duties, and so on. Duties such as these were inherited with the plots, and if a field was divided between brothers, the duty was divided. Similarly, the transfer of a field involved the transfer of its obligation. For the Kalash, the usual obligation was for one man from every household to serve in the Mehtar’s palace, often in carrying firewood. Some villages had collective obligations; for example, it was the duty of the inhabitants of Ashret to ensure safe conduct to travellers crossing the lower pass, and in particular to protect them from attack by the Turistan.²⁸

It also seems likely that a substantial number of the population were obliged to contribute goods rather than to provide services.

²⁷ Barth, 1956a, pp.91-2.
Early writers mention a tax on agricultural production; others mention that the ruler and provincial governors used to receive grain and animals collected as tax, and that as payment for their services, officials were entitled to keep a certain proportion of whatever was collected in their locality or district.

It was probably in the remote districts, and certainly in any not fully under native control, that obligations were paid in goods rather than services. The Gaurs paid an annual tribute of rice, the Bashgals paid clarified butter and honey, and the inhabitants of Harat paid clarified butter.

Obligations of these kinds applied to the cultivating classes, but members of the ruling family and the aristocracy - the khanseds - were exempt from such specific duties. Their primary obligation was loyalty to the ruler, and support in dispute or war. They constituted a category who were also liable to serve the state in whatever 'honourable capacity' the ruler required. From among the most influential were chosen the senior provincial administrative officials, namely the governors and khanzads, while from the remainder of the executive and administrative positions of the state were filled, e.g., those of junior officers of the ruler's bodyguard, district officials, charwacs, court officials, and envoys to neighbouring rulers. In addition to the officials of the central government, the eight provincial governors each headed a subordinate administration, so that the total number of those who held some office of the state was considerable.

Such official positions were usually inherited within a family, although the ruler nominated which of perhaps several sons was to follow the father, and the ruler could replace any office-holder at any time. When an individual was removed from office, if there was no protege of the ruler, then the brother or a near male relative of the former holder was usually chosen, providing he

29 H. C. Ince, "An Account of Upper (Dahistan) and Chitral, or lower (Dahistan) together with the independent Afghan States of Sirmoor, including Malakand, Hindukush, 1904, pp. 136.
30 H. C. Ince, "A Grammar of the Dohar dialect (Chitral) with introductory sketch of the country and people, 1907, p. ix.
31 C. B. Scott and Woolthorpe, 1905, p. 268, who record that 'shah-al-dalak' used to receive more than 6,000 sheep annually, together with other agricultural produce. Also see Scott, 1917, p. 77.
32 See, 1934, p. 20.
33 See, 1883, p. 132.
34 "The provinces are under khansads (princes) ... and are again divided into districts under leading khansads, styled khaks or melahs. They in turn have zaibals in charge of several villages, and makkals, or revenue collectors." O'Brien, 1919, p. 2. See also Scott, 1937, pp. 19-20. These titles were however used differently in different parts of the state; Lockhart and McDougall, 1935, p. 208. The provinces of the future territory were: Peshawar, Shish Mal, Agun, Chitral, lati, or Shogor, Shalik, and Murkho.
fulfilled the requirements of ability and loyalty. Those who were left without appointments had the inevitable duty of being loyal to the rulers\textsuperscript{34}. However it appears that when a Mehtar was succeeded or deposed, the office-holders who had served him were not necessarily removed unless they were thought likely to threaten the new ruler’s position, or unless they had some close personal relationship with the previous Mehtar. Only if these were expected to change their allegiance to the new ruler, and the ruling families were expected to change their loyalties\textsuperscript{35}.

These conventions which concerned appointment to, and retention of, the offices of state gave a measure of stability and continuity to government, both at the centre and in the provinces. Where changes in the Mehtarship were frequent, then the continuance of the existing administration prevented disord er from spreading beyond the circles immediately concerned with the struggle for the throne.\textsuperscript{36}

Nonetheless, data collected in Chitral makes it clear that an individual’s political influence, and his social standing and economic security depended largely upon the nature of his relationship with the Mehtar, from whom these attributes were derived. This was given formal expression at the court, especially at the daily receptions there.

Every person holding any office, from the Governor of a province to the headman of the smallest hamlet, has yearly to visit the Mehtar to pay his respects and remain attending him till dismissed, when he receives suitable presents.\textsuperscript{37}

\textsuperscript{34} A device which has been used by all the ruling families of Baluchistan to establish and ensure support and loyalty among their aristocracy is the ‘Mehtarship’, which has been described by Schomberg, 1935, pp.190-1.

\textsuperscript{35} Also Frontier and Overseas Expeditions, 1907, 1, p.41.

\textsuperscript{36} Hence the use proverb, ‘He who rules my country is my king’. This was used with reference not to alien conquerors, but to the formerly frequent changes on the throne, cf. Schomberg 1935, p.27.

\textsuperscript{37} Between August 1892 and May 1895, there were 6 successive Mehtars of Chitral. It was the continuing cohesion of locally-based lineages, with traditional administrative functions, that Berth, 1956a, pp.52-3, suggests may have been also characteristic of centralized government in Kandahar, and account for the survival of descent organization there. In Chitral, at the present time, the members of the lineages which traditionally provided the wazir or hakim continue to be addressed by these titles, and their lineages continue to be associated with these posts.

\textsuperscript{38} O’Brien, 1895, p.ix; also Ruggles-Brise, 1883, p.413.
While in Chitral town, where they might remain for two or three months, officials attended two or even three receptions daily. At these, the business of state was transacted, and the Mehtar

... made his decisions public, granting favors or dismissing, dismissing, or condemning people, all in a complex system of traditional regalia and titles. It was on such occasions that the Mehtar used to disperse revenues to his supporters and to the officials of state. These were usually either

in the form of costly imported goods, such as silk and brocade robes, turbans and weapons, or in the form of a horse, a camel, or a hunting dog.

It was also customary for the Mehtar to provide all those who attended any reception with food, much of it of the highest quality, viz., meat bread, meat, rice and butter. In this way, much of the agricultural produce collected as revenue was consumed. The more durable presents, and also horses, were imported from the ancient commercial centers of Turkestan and Bukhara.

The Mehtar financed the costs of the court and of the import of such goods from revenue raised by various means. For example, in addition to the agricultural and service levies, annual-al-silk and agricultural land of his own, he maintained monopolies in the exploitation of minerals and timber, he imposed a tax on all traders, he received subsidies from Jumma pawns, and tribute from Surjistan, and he operated an extensive trade in slaves.

A longer-term and more significant source of reward, a senior official or a powerful supporter was to grant him the usufruct of an area of the particular category of land that was in the gift of the Mehtar. Except for the governors of provinces, the state appointments that were held by Qamzada were not usually associated with particular plots or areas of land. The Qamzada were landowning individuals in their own right, and retained their ancestral estates

58 Tanjusban, 1594a, p.491.
59 Smith, 1956a, p.51. See also Curson, 1924, p.133.
60 Linstead and Goodenough, 1924, p.143–145; Curson, 1924, p.134. Of the trade he was the director and the Mehtar, Soordcroft was told in the 1650s that "the chief return is in slaves, kidnapped from adjacent districts, or when not so procurable, the aja seizures and cells his own subjects." Soordcroft and Trebeck, 1441, p.24. See also Tambe, 1370, pp.113-123. C. Northcote, "The Davi Ukrainian's Journey through Chitral to Mazar in 1870," JAS, 11, (1972), pp.13-71, 139.
while holding office, but they were eligible to be granted an estate of
mehrbanī land, as it was known.41 Such gifts were not hereditary, and might
revert to the Mehter if the recipient fell into disfavour. In the past there
was much land of this category, but it has gradually decreased in quantity dur-
ing the present century as estates have been confirmed in personal own-
ership.

There were also estates that were the personal property of the ruler. The
income from these was presumably intended for the requirements of the Mehtar's
court household and his personal expenditure. These estates were administered by
stewards and were mostly cultivated by tenants. In the 1930s land that was the
personal property of the Mehtar was about 2,000 acres, and was located in various
parts of the state.42

At the end of the 19th century these traditional arrangements were modified.
The system of obligations was partially replaced by a tax on gross arable
produce. This tax is known in Chitral as yang, and is payable annually on all
land that is cultivated during the current year.43 In Chitral town and south
of it there is also a tax on livestock of 1 in 41. This is not levied in the
north of the state because livestock are relatively fewer in numbers there.
Some of the older service obligations were retained during the first part of the
20th century for the upkeep of the new roads and bridges and for the provision
of the Mehtar's bodyguard.44 During this period the state officials continued
to be rewarded from the produce collected as yang and by the grant of land.

These obligations and rewards, along with other relics of the traditional
system, were finally abolished at a time of reforms after Chitral had ascended
to Pakistan.45 Yang has been retained and now yields approximately half of the
annual state revenue of Rs. 1,700,000.46 The business of collection of the tax

41 See also Scott, 1937, pp.17-9, who distinguishes varying categories of
state-owned land, all of which are included here as mehrbanī land.

42 Scott, 1937, p.14. Some of this land may have now been given to other
members of the ruling family. At the present time the total annual income
which remains to the Mehter from his estates and from the leasing of his
pastures is about Rs 10,000.

43 There are no exceptions to the payment of yang, but it was remitted in
Leaœur for a period of 50 years after the campaign of 1895. Schonberg
1938, p.249.

44 Scott, 1937, pp.6, 12-4; Schonberg, 1938, pp.96-7, 217.

45 Laver-ud-Din, 1905, p.45

46 Richard Cable, unpublished 43.
is auctioned annually to contractors. Village committees of elder men have been retained with advisory functions, but the tax reforms deprived the village headmen (chowkiloog) of their chief traditional functions. More recently, other of their functions have been assumed by the basic democrats. The system of provincial governors and the old offices of naib, atiliq etc. have been abolished, and replaced by six tehsildars whose appointments are controlled by the additional political agent. Tehsildars may be moved from one district to another; thus the association between locally-based lineages and local administrative function has broken down. Some of the operations of the state government such as the levying of uahr continue to be fulfilled in much the same way as in the early part of the century, while others have been reorganised, for example the maintenance of law and order is now the responsibility of a police force which has been raised from among the ruler’s bodyguard, while the latter has been disbanded.

The present administration of Chitral thus contains elements of the traditional katora system, of the modified system introduced after the British-Indian intervention of 1895 and of new reforms since 1947. Some members of the traditional office-holding families continue to exercise great influence, several have been elected as Basic democrats, and many of the offices of the present administration are filled by them.

The Administrations of the other Principalities in the 19th and 20th Centuries

Yasin could not be visited during the present investigation, and no information was obtained about Mahaqrta administration beyond the fact of its having been similar to the latter. 47 The disturbances of the 19th century and the subsequent reorganisation into Political Districts appear to have obliterated much of the traditional system. Little more is known of the traditional Durair administration in Amlaal, but no traces have been recorded of any system of obligations attached to particular plots. In 1860, nearly 40 years after Durair became tributary to Kashmir, Bidulph reported that, in effect, the traditional system had been modified:

... no revenue is paid either to Cashmere or to other than Chen 48, who receives in lieu a fixed subsidy from the Maharaja, in consideration of which he is bound to maintain a certain number of men to guard the frontier posts in time of peace, and to render military service in war. 49

47 See also Bidulph, 1860, p.55ff.
48 Bidulph, 1880, p.31
Since the changes at the end of the 19th century, the hierarchy of officials who functioned in subordination to the mahwants and the tribal rulers have largely disappeared. Only the village headman - known in the Gilgit Agency as jangada - have retained their position. In the political districts they are now responsible to the governor for the administration of their villages, and they are also agents for the collection of revenue and the organization of communal activities. They are appointed by the governor, and their appointments are not necessarily hereditary.

Villages are almost entirely agricultural; they have the appearance of being unselective, a result of their continuance to be based on traditional practices and conventions - for example, members of the tribal and mahwate families, sayeds, and başadars are not normally liable to pay at all. In general the tax levied is roughly related to the area of land cultivated. The amount paid by the owners of average-sized holdings is reported to be about 1 rupee of wheat. This rate is lower than the average for the settled district of Gilgit, and is also lower than in Chitral. When the governor tours his district and visits a village, there may be small additional gifts for the maintenance of his party. In Jangada, the revenue is paid to the jangada, as an independent ruler, has the right to utilise all of it in the maintenance of his administration. In Yasin, Ishkoman, and Cupis, part of the revenue is paid to the Pakistan Government. There are also some small charges on shopkeepers, and on gold-washing which is practised by non-residents, mostly immigrants from Chiles.

In Yasin, Ishkoman and Cupis, the governors have the right to the use of certain areas of land, which doubtless represents a former category of 'estate' land. The present government retain the right only so long as they are in their appointments. They may also have purchased personal property. In Ishkoman there is Jangada family land, owned by right of succession. This is cultivated.

49 At the time of field-work, the system of Jangada bureaucracy had not been introduced in the Gilgit Agency.

50 Passmore, C. Overseas Expeditions, 1:07, F. 305.


52 In an unspecified but recent year, the following items were received from the Districts by the Pakistan Government: Yasin, sheep 220, maize 120; Cupis, sheep 200, maize 120; Ishkoman, sheep 120, maize 40, butter 52 lbs, yearling goat 25. Unpublished data provided at the Agency Office, Gilgit. See also the Imperial Gazetteer, Vol. III, pp.27.
by servants and tenants who may be excused their tax obligations or receive presents from the as in return for their services. Control over barren land, at least in Yasin, Lhashar, and Gupis is exercised by the Pakistani government.

As far back as the time of any tradition that has reached me, Gilgit has been governed by Persia, it has not been of these valleys ruled a democracy...52

Nevertheless the Gilgit rulers' control over the eastern and southern parts of the state appears to have been intermittent. In the Barsitsh valley, and probably also in Sai, the descent organization remains intact, and there are other reports and indications of autonomy and there are also blood-souls. In the Gilgit valley itself there are now few traces of the traditional state administration which operated up to the Sikh intervention of 1842, but Ridulpha gives some information about the former revenue system.55 There were levies on arable produce and livestock, on grapes and wine-making, on the autumn meat slaughter and on game, and on the production of cloth and silk. There were customs on watermills, carriages and gold-washing. Certain villages paid extra taxes, the origins of which were obscure in Ridulpha's time, as there were state lands in the larger villages whose cultivators were exempt from payment under the as there was a hierarchy of officials who were drawn from the revenue collectors. The last names of these were recruited from among the higher classes - those of Shina and Wakhis.

No trace is found anywhere in the eastern part of the region of obligation attached to particular plots, but some people not the obligation to provide labour for load-carrying, and it is clear here, like the earlier rulers, the as and the paramount right to all land in the state.57 The use of Gilgit also at times raised revenue by enslaving their own populations in the number of Ator and Ashmaiti rulers.58

The traditional system was modified by the Sasharm administration, and subsequently, in 1893, both Gilgit and Ator were settled and have since been

52 Frew, 1975, p.435.
53 Jetimar, 1961, pp.84-5.
55 Ridulpha, 1930, pp.41-4.
56 Thakur Singh, 1917, pp.121-2, 170.
57 Thakur Singh, 1917, p.11.
59 Ridulpha, 1930, p.41; Thakur Singh, 1917, p.22.
subject to the system of taxation on the productivity of cultivated land which is practiced elsewhere in the subcontinent. A standard rate was fixed, and the tax was assessed according to its size and qualities. In a revision of the Settlement in 1915, it was decided that the standard rate of taxation should be at about 13% of gross arable produce. Because the reassessment was made partly in money terms and at 1915 prices, and has not been revised since, the rate of taxation is now relatively low; in Gilgit most farmers pay 1-3 maunds of grain and Rs.1-10 per year, while in Astore, where the tax is mostly paid in cash, the average rate per household appears to be less than Rs.5 per year. After the settlement of 1913 the office of landholder was retained, and its holders have been responsible for revenue collection and for village administration to the Assistant Political Agent at Gilgit town and Astore village. The other traditional ranks and offices were abolished. Descendants of the former ruling families receive only the income derived from their personal property.

In Astore there are clear traditions of a period before centralized rule was established, and there are some indications of the survival there of a stronger descent organization than in Gilgit or Chitral. All informants agreed that in the 19th and early 20th centuries the administrations of Hunza and Nagar were essentially similar, one to the other, and some features indicate similarities to the Jatope system. Modifications have been introduced, but much remains that is traditional. Parts of the states were under subordinate

61 The total collected in Gilgit Sub-Division in a recent but unspecified year was Rs.5,677; wheat 3,527 maunds; maize 2,956 maunds; barley 465 maunds. In Astore Sub-Division in the same year the total was Rs.1,560; wheat 50 maunds; maize 68 maunds. Unpublished data provided at the Agency Office, Gilgit.
62 In Gilgit the title of Rana is extant, and descendants of the former Rana now much of the land in the centre of the town on which the bazaar now stands. In Astore much of the property of the ruling family was confiscated at the time of the Sikh intervention. Aurel Stein, Sani-Buried Ruins of Khotan etc., London, 1903, p.21. (for full title see bibliography).
63 See also D. Lorrimer, 1935, II, pp.237, 261ff.
governors, usually members of the ruling family, who collected revenue in their district and were entitled to retain part or all of this. Their duties were to keep law and order and to support the dair in peace and war. Society was divided into those who were eligible for state offices and those who had obligations to provide goods, labour or military service. Among the officials were village headmen and serving with apparently similar duties to the char搏s of the native villages.

Lorimer mentions wazini estates in Rurua, the usufruct of which were in the gift of the dair, and which presumably corresponded to mehran land. The dair do not appear to have had such explicit or complete rights to cultivable land as the dail rulers, nor did they enslave their own populations. The dair of Rurua are reported to have derived much of their revenue by instigating and organizing raids upon the Kirghis of Turkestan and upon the caravans of trade between Eastern Turkestan and Ladakh. All booty and captives became the property of the dair, who could distribute the goods among his supporters as officials, while captives could be sold in the slave markets of Turkestan.

Shortly after the beginning of the period of British-Indian suzerainty it was reported that

The revenues of the dair or dair are derived from taxes on cultivation, marriage and divorce, trade, livestock, and gold-washing. Inter, taxes on cultivation appear to have been lightened, and the dair’s revenues to have depended largely upon their own estates and pastures. At the present time it is reported that in Rurua there is a levy of approximately 50 lbs. of wheat on each household in all villages except Eshar. (other informants stated that all Rurua households are except), and an additional levy of animal products or grain on the inhabitants of Sijhak and the

66 Kuthus, 1880, p.12.
67 See e.g. Youngusband, 1893a, p.486; Ralph F. Cobbold, Innermost Asia: Travel and Sport in the Pamirs, London, 1900, p.22; Stein, 1903, p.32.
68 Cuban, 1926, pp.106-2; Schomberg, 1935, p.10.
Shina-speaking villages. The additional amount payable depends upon the size of holding; in the Shina-speaking locality up to 3 maunds of wheat may be paid altogether; and in Gujhar a farmer may pay in addition to the grain, a goat, 2 lbs. of butter, an some cloth and goat-hair. Taxes in Nagar are reported to be based mainly on the size of holding. In both states members of the ruling families, officials etc. are exempted. Only in exceptional circumstances do any of the populations now work for the rulers without payment.

Schapera, in summarising stages through which the evolution of centralized governments may pass, has suggested as a late stage the acquisition by the governments of rights to the lives and property of its subjects. By this interpretation centralized government under the Katora, Dushtae and the Raja of Gilgit may be said to have been firmly established. The rulers of these states had explicit rights to all land, and at least de facto rights to the lives of many of their subjects. Under the Katora even the right of enslavement appears to have been explicit. If a progression is suggested, then in Dushtae, Gujhar and Nagar centralized government was perhaps less firmly established.

Acaphalacous Organisation.

That the organisation of what they termed 'republics' was altogether dissimilar was recognised by Irow and Riddolph, who described 'assemblies' and 'councils' at which matters were discussed and, if agreement was reached, decisions were made. Those elected to the council were chosen on the basis of their wealth and personal qualities of 'bravery, liberality and elegance'. More recently Barth has described the system in Kohistan. There are slight

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70 Schapera, 1936, p.220.
72 Irow, 1875, pp.460-4; Riddolph, 1880, p.17-8.
73 Barth, 1956a, pp.36-8, 62-3.
differences between Kardia, Ruber and the Cawri, but the same principles apply

The standard procedure whenever a decision must be reached or a
group must act as a corporate unit is to constitute a "council"
(ahr-r), and through discussion reach agreement and a plan of action.14

A jirgas consists of 12-20 members, the mohtars or jirgas, who are
elected and who generally sit as representatives of descent groups. They are
chosen on the basis of wealth and influence, and their powers of oratory and
skill in argument. In some districts they may be replaced if they lose the
confidence of those they represent, but in others a particular lineage becomes
confined in leadership of the group, son succeeding father as representative
unless he proves to be incompetent. Since political rights and rights to land
are closely associated, only farmers and landlords who are members of the
land-owning castes or groups are directly represented on the jirgas; labourers,
craftsmen and members of the low castes may be indirectly represented by
political alliance, but in many communities they have been without political
rights. Earth continues

"Decisions of the council are definitive and must be followed, where
basic agreement cannot be reached by the council members, the
matter is postponed, and informal discussions and "deals" are arranged
in preparation for reintroducing the topic at a later meeting."15

Jettmar, who has studied the working of the jirgas of Bhirki, confirms that
they are essentially the same as in Kohistan.16 He also notes that the
system is 'tiered', in that decisions affecting a locality or a community
as a whole may be made by a jirga in which representatives of villages or
localities meet together.

While jirgas have had the functions of government, they have clearly
fulfilled these in a fashion very different from the governments of the
principalities. Kohistan, the regional name for this kind of organization,
implies armed conflict and the absence of law and order, and many observers
have commented upon this and upon the incidence of bloodfeuds.17

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74 Earth, 1955a, p.300.
75 Earth, 1955a, p.36.
77 Bloodfeuds are hereditary, and may be continued for generations after
the original circumstances are forgotten. Earth, 1955a, pp.45-6; 65-6, has described the rights to, and responsibilities for blood-
revenge in Kohistan, and Jettmar, 1964, pp.123-4, has described the
usual origin and course of feuds in Bhirki and Jangl.
Schoenbergs wrote of Darel and Tangir

The inhabitants of these two valleys know nothing of law and order; the one interest of their lives, their one obsession, is murder. They obey no man, they do not even obey their jirga...

While this may exaggerate, it was observed that in Chilas and Gawar Kohistan feuds are a continuous preoccupation for many farmers. Most men are constantly armed (see photographs 9, 10 opposite), and at informal meetings of the villagers at Karte and Rosal every man present reported that he was involved in a feud. The present situation in Tangir was described by informants who have had official duties there; farmers, when present in the village spend their time in their fortified dwellings, or alternatively sit, armed, in the sanctuary of the mosque. No official data were collected, but it was reported from Tangir that since the community's ascent about 60 individuals have been imprisoned for homicide, and in Gilgit town it was estimated that there are about 40 instances of homicide a year in Chilas Sub-Agency. Bloodfeuds are also reported among the Cawar-Beti, the Demei, and in Harnosh.

The emphasis upon homicide as the particular object in the pursuit of feuds has appeared in the more recent literature. In one earlier account of Shimaq feuds it was stated that dissention rarely resulted in bloodshed, but ended in stone-throwing or in a bagging competition. Longstaff probably indicated the source of this change in the form of the violence when he wrote

With modern rifles the blood-feud had become intolerable; a threatened man hardly dare cultivate his fields.

Jettmar has observed that one of the restraints on the development of bloodfeud among the jirde, labourers of the moshaffe communities in their inability to afford guns and ammunition.

78 Schoenbergs, 1935, p.237
79 See also Israr-ud-Din, 1965, pp.93-4.
80 Nishe, 1955, p.291
81 Frontier and Overseas Expeditions, 1907, I, pp.35-7. See also Chiland, 1907, p.103. Another form of violent but non-lethal conflict is still indicated by the practice of the Cawari of binding their legs in thic pottes, which used to be for protection in stick-fighting.
82 Longstaff, 1950, p.217
83 Jettmar, 1960a, p.126.
Besides endangering the lives of individuals, already-established feuds and factions make communal agreement even more difficult to reach when topics are discussed in the jirgas. Any kind of communal enterprise and co-operative action has been especially difficult to organize.

The chaotic republicanism of these ... communities ... is a source of utter paralysis as regards any concerted policy or action ... Nevertheless some jirgas, notably in Barel, Cor and Gauri Kohistan appear to have been effective, and to have made important decisions concerning the allocation and conservation of resources, even though their influence over feuds may have been limited.

In addition to internal discord, there was formerly intermittent fighting between neighbouring communities. Jettmar has described how much hostilities resulted in the depopulation of the smaller intermediate valleys of Shinakal, leaving the main centres of population in Barel, Sandir, Cor and Chilian, each with "... a glacis, an empty zone, around their borders for the sake of defence." Fighting on this scale ceased after the 1890s, and the smaller valleys are now reoccupied. Increasingly effective administration under the Gilgit Agency and Swat, and the heavy penalties that have been introduced, are now reducing the incidence of internal bloodshed.

The traditional organisation of the Pathans was also elective, but appear to have been considerably more effective in organising communal action and in maintaining law and order. The election of 'elders' was, at least in the 19th century, slightly different, in that they were chosen primarily for their ability to lead the community, rather than to act as representatives for particular descent groups or factions. The rare occurrence of homicide can

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84 Jettmar, 1911, p.118.
85 See also Jettmar, 1909a, p.129.
86 Frontier and Overseas Expeditions, 1907, I, p.30
87 Jettmar, 1961, p.66.
88 This is also indicated by a comparison with the small area of unadministered territory on the left bank of the Indus which is all remaining of Baghistan.
89 See C.J. Robertson, "Baghistan", Cal., IV, No.3, (Sept. 1894) pp.202-3
be attributed to the effective enforcement of fines for violence, and to a different ethos and conception of 'honour', so that it was the responsibility of third parties to intervene to prevent violence. Of the Khas traditional political organisation little remains but vague traditions of chieftains and internecine fighting.

Before the azeefrah communities accepted the suzerainty of Kashmir or of Swat, the individual had no obligation in goods or services to the community other than any which might be decreed for some specific purpose by the Jirga, or which were customary for the upkeep of the mosque and the payment of craftsman, surngmen etc. With the assumption of Pakistan's administration by Swat, taxes were introduced. The system is said to be the same as in Chitral, i.e. 10% of arable produce and one animal in 41 are payable. More recently, the collection of revenue among the Kuri has been suspended, but it continues in Kaniz. As in Chitral, the collection is auctioned to contractors.

In Kini the incidence of taxation is unsystematic, having originated and been maintained according to varying agreements and treaties made between the communities, neighbouring principalities, Kashmir and the British-Indian Government during the 19th century. Much of the taxation is nominal and represents tribute; for example, Tarin and Tangir continue to pay an annual total of 7 tolas of gold-dust. In Kini a certain sum is assessed on each village: Mat (140 households) pays an annual total of Rs. 72, Mst (60 households) pays Rs. 114, and Kraya (43 households) pays Rs. 16. Certain of

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50 Robertson, 1896, p.442; M. A. Shair, Jee. ud. dafir, Peshawar, 1943, p.9.
91 Robertson, 1896, p.442.
93 In the early years the jagra appears to have been collected by the Swat army garrisons for their own consumption: A. Stein, "from Swat to the Gorges of the Indus", GeoJ., 6, No.2, (Aug.1942), p.52.
95 The total revenue received from Chilas in a recent year was Rs. 34,439 together with 16 yearling goats, and 0.75 tola of gold-dust. Unpublished data provided at agency Office Gilgit. This for tribute was remitted after the events of 1932-3.

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the jirgasans, the appointment of all of whom is now controlled by the Agency administration, are given the additional responsibility of acting as government agents and of collecting any taxes due. For such duties, these lambadars, as they are known, are remunerated.

The unfavourable consequences of acephalous organization for agriculture and economic activity have been many. Some have been a direct result of xenophobia and lawlessness; for example, the reluctance of traders and travellers to pass through Kohistan, Shinaki and the southernmost Chitral valley, (which in itself added to the isolation and northward-orientation of the principalities), and the reluctance of land-owners to invest in the extension or improvement of cultivation. Other unfavourable consequences, equally important, have been indirect: the social system which was especially associated with acephalous organization results in social and economic immobility, and the criteria for ownership of land are exclusive and inequitable. The administrations and institutions of some principalities were also unfavourable to cultivation in several respects, but they all incorporated some element of 'flexibility'. This was altogether absent in the acephalous communities.
CHAPTER 5

SYSTEMS OF SOCIAL HIERARCHY

i Caste Status
ii Royal and Saintly Status
iii Social Classes in the Principalities
iv The Status of Immigrants

Tribal organization and centralized government each have associated with them particular social systems. As a centralized government becomes established, so descent and kinship become less important, social classes and an aristocracy arise, and foreigners may be admitted to the community and accepted in the social system - i.e. membership is not determined solely by hereditary criteria. This kind of development existed under the Katchi and Kashmari and in Punial, Anza and Nagar. It is probable that it likewise existed in Askar and Gilgit, but the traditional social systems there have been obscured by the 120 years of Kashmir, British-Indian and Pakistan government. It also appears that in these two districts kinship, as represented by the distinction between Shin and Yashkun, remained an important feature of society, at least until the early decades of the present century.

The contrast between an ordering of the population by descent and an ordering by classes is most conspicuous as between the Shinaki communities and Chitralt. Under the Katchi there was a sophisticated social organization, which continues now, but modified towards a lesser degree of formality. In Kohistan and Shinaki the descent organization remains almost intact, although sometimes lacking in ‘structure’, which is attributed by Barth to former periods of centralized rule.

1 Schapera, 1956, pp.219-20.
2 Barth, 1956a, p.19ff.
Caste Status

The earliest 19th century travellers to write about Gilgit and what is now the Gilgit Agency gave considerable attention to the 'caste' structure of the Shina-speaking population. Frew and Siddulph described five castes, four of which have been accepted by later writers and are explicitly acknowledged in the districts where Shina is the predominant language. The four are Shin, Yeshkan, Kamin and Pom, in descending order of ranking.

The term 'caste' carries many hierarchical connotations, few of which are relevant in Bistan at the present time or have been in the recent past, especially since the Islamic conversion. Nevertheless the continued use of the term is thought appropriate by ethnologists who have recently written about Bistan. The characteristic which largely defines a caste in Bistan is a ban on the marriage of a woman with a man of lower caste. She is normally married to a man of her own caste, or occasionally to a man of the caste at one rank higher, in which case her children's status is inherited from the father only.

Some of the caste divisions of Bistan are ethnic in origin and represent the subjugation of an established population by an invading group. That the high caste position of the Shina is of such an origin was suggested by Siddulph. In other cases, as with the Kamins and Poms, the caste divisions are associated with the provision of specialized services such as those of weaver and blacksmith.

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3 Frew, 1873, pp.425-9; Siddulph, 1880, p.145.
5 Siddulph, 1960, p.36. There is a considerable amount of evidence for this conclusion, "Although numerically inferior, they have established their language to the exclusion of others wherever they have gone! ... Their geographical distribution suggests a migration from the Indus valley into the lower part of the Gilgit and Hunza valleys; there is a strong tradition that they are a conquering race; and it is they who have tended to maintain the barrier to the downward movement of women in marriage.
Such a conception of caste appears to be derived from the Hindu Janamand system; other relics of this are seen in the traditional arrangements for payment for the services of craftsmen and in the granting of land to them. A third circumstance which may be associated with the origin of a caste barrier has been suggested by Barth, who observed such a division among the Lunda Kohistanis. One group may have been converted to Islam at a later time than the other and its members, while still pagan, would have then being debarred from marrying the women of the Moslem group; hence arose what has become a caste barrier.

When the caste divisions were first described, various opinions were expressed about the origin of the Yeashums. Several writers have suggested that the Bhumbo of Burna and Bogar and the Marichmar-speakers of Bawin are Yeashums. Lorimer can probably be accepted as the best authority on the use of these names. Of the term Yeashum, he writes that it

... would have the definite and appropriate meaning 'original inhabitants', as opposed to the Sin invaders ... the appellation ... has been adopted later by the Sinu, in whose mouths it has acquired a certain implication of inferiority resulting from their own view of themselves as successful invaders among an original population when they had at least reduced to a subordinate position.

5 So instances of a former prohibition on physical contact between castes have been recorded, but in earlier years the Burna would not eat food prepared by the Haricho; Lorimer, 1935, I, p.331.
3 It is also recorded that formerly in Shinki the castes there did not eat together; Bev, 1913, p.553. Craftsmen are often segregated in separate villages or settled on the periphery of a village where the majority of the inhabitants are members of a superior caste. See e.g. D.Lorimer, 1939, pp.3-6; Wicke, 1929, p.239; Jettmar, 1960a, p.133.
7 Barth, 1950a, pp.42-3.
8 Such a barrier is observed between Kho and Kalash in Southern Chitral. When members of the latter group embrace Islam, they then become eligible to marry with members of other groups of an appropriate social status.
10 E.g. Company, 1894, pp.242-3; Durand, 1900, pp.201-2.
11 D.Lorimer, 1938, p.384.
At the present day the appellation Yeshkun appears to be used only in differentiating the two main elements of the Shin-speaking population of Gilgit and the neighbouring regions, viz. the Shin and the Yeshkun.  

The Shurusho are

... people in Hunza and Nagar whose first language is Shurushaki. They call themselves by this name. ... Classification of the Shurusho as Yeshkun ... is not supported by local practice ...  

Although it is likely that the Yeshkun and Shurusho are in fact descended from a former more widely-spread Shurushaki-speaking population, the local convention regarding them as different groups has been retained in this discussion. This has a practical advantage, since the social relationships between Shins and Yeshkuns in the Shin-speaking districts differ from those between Shins and Shurusho in Hunza and Nagar.

The 'supposed superiority' of the Shins over the Yeshkuns continues to be given effect in most of the Shinaki communities, where Shins may take Yeshkun women in marriage but not vice versa. However in those districts where Shins and Yeshkuns are roughly equal in numbers or in political strength and ownership of resources, or where outside influences for social equality have been strong, they appear to rank equal in that reciprocal marriages occasionally take place, e.g. in Gilgit and Yasin. In the 20th century caste divisions in Gilgit, Jirral and Astor have disintegrated to a considerably greater extent than when they were first described.

12 D. Lorimer, 1938, p.423.  
13 D. Lorimer, 1938, p.423.  
14 A view recently supported by Jettmar, 1961, p.61.  
15 Of the Verchikwar-speakers of Yasin little is known. In local usage they appear to be included with the Yeshkuns, and they have not been distinguished as a separate group here.  
16 In Gilgit and Astor the average per capita share of land as between Shins and Yeshkuns appears to have been almost exactly the same; Chadur Singh, 1917, p.46. Philadelphia, 1920, p.43 implies that under the Gilgit state administration individuals from both castes could be members of the aristocracy and hold offices of state.
The Boms and Kamins, numerically much inferior, were thought by Biddulph to have come from the south. 17 This has been confirmed in the case of the Boms by Lorimer 18, and has again been suggested for the Kamins by Jettmar. 19 The Kamins are found in those areas occupied by the Shiina, and are traditionally 'tenants and craftsmen' - millers, potters and weavers. The Boms are found in small numbers in most parts of the region, not only in Shiina-speaking areas. According to traditions they were introduced into some communities to fulfill their caste functions, especially into the principalities to act as musicians; in this way they came to Chitral where they are known as Ustadan. Probably for a similar reason they were brought to Bumta, where they are known as Bericho, and where they continue to speak their own language. 20 In the Shiina-speaking areas and in Chitral, they have adopted the local language. An additional caste occupation is blacksmith. Throughout the region, both Boms and Kamins remain largely endogamous, but caste restrictions on occupations have to some extent broken down in the principalities. 21

The four castes - Shiina, Yeshians, Kamins and Boms - make up in varying numerical proportion the great bulk of the populations of all the Shiina communities, of Astor and of most of the Gilgit valley.

Where the political organization is acrophalous, the population is ordered socially by reference to caste and then, within one caste, by reference to descent and clan. Clans and descent groups may be ordered in some form of hierarchy, or may apparently rank equal. Given his caste status and, if relevant, his clan status, the social position of an individual in the acrophalous communities appears to have been determined largely by his wealth and the scale of feasting he provided for the community at rites of passage, especially funerals, and subsidiarily by his oratorical abilities.

18 D.Lorimer, 1934, p.56.
19 Jettmar, 1934, p.61.
20 D.Lorimer, 1939, p.6ff.
21 There are various other numerically small groups of craftsmen in the region who invariably rank low, e.g. the Sonwals of Chilas, who are gold-washer and ferrymen; the Kashmiri silversmiths of Kashrote, the Shoto leather-workers of Nagar, and the Bari, who followed craft occupations among the Kalash and Bago-Geli. The Bari were described as slaves; e.g. by Roberton 1896, p.99ff; Schomberg, 1938, p.195. Since the Islamic conversion any distinction as between slave and master has disappeared, but as blacksmiths, leather-workers etc., the Bari continue to rank at the bottom of the social scale.
In Kohistan there are two Kohistani castes and also craftsman families speaking Pande who form the lowest caste. Among the Cawri there are no caste divisions, nor are other groups present in Cawri Kohistan — farmers, agricultural labourers and craftsmen are all Cawri. Within these communities, however, a similar conception of individuals' status is found, and within one group or caste wealth is again the primary consideration.

Royal and Saintly Status

The caste system described by Drew and Hillings was recognized by them to apply only to the Shina-speaking population. In Hunza, Nagar and the Rushani and Sutlej territories there is a division into social classes, each defined largely in terms of the obligations of its members towards the state. It is a very different conception of social ranking from that held in the acausinate communities.

Ranking highest of all in the principalities are the ruling families. All are said to be of foreign origin. Most of them have been closely linked together by marriages, both within Baltistan and over a wider area — with the ruling families of Baltistan, Chitral, Badakhshan, Kirgida etc. As a group, the royal families are endogamous, regardless of seat, and appear to have ranked equally. Inter-state marriages were usually contracted for political purposes, but since the political changes of the end of the 19th century, the scope and necessity for political alliances has become much lessened.

Nevertheless, within the Gilgit Agency, the governors and Viceroys are closely connected by marriage. In addition to their special political and social status, some of the rulers have had ritual functions and special attributes.


In Baltistan also there are no castes, but a division into three well-defined social classes: C. du Riche Preller, "The Racial and Economic Conditions of Trans-Himalaya (Upper Indus Basin: Ladak and Baltistan)," Scottish Geographical Magazine, XL, No.VI, (Nov.1924), p. 34.

24 For a recent 'manifestation', see Stephens, 1953, p.170.
Occupying a special position by virtue of their saintly descent are small groups of Seyeds and Mians who are found scattered in small numbers in many communities of Nardistan. The Mians of Indus Kohistan and the Seyeds of Shinaki are descendants of the Pathan missionaries who converted these communities to Islam, and are therefore especially revered. Such individuals rank highest of all in the Adeptalas communities. Similarly in the principalities the descendants of the early Islamic teachers and their disciples are greatly respected and rank second only to the ruling families. The small Fire of Chorokhand in Inkhwa are especially revered, and are accorded the highest social status, being connected by reciprocal marriages with the ruling families of Hunza and Yaluri. At times their influence and prestige has exceeded that of the Bashwurst rulers.

The fifth caste which Drew and Biddulph proposed was the Ronu, who were formerly represented both in the Gilgit valley and in Chitral. The features of this caste as given by these authors, together with its proposed origin, illustrate some of the criteria by which social status is determined in the principalities, and by which individuals may rise or fall in the social scale. That the group was anomalous was suggested by Drew:

As to the first, Ronu, I am not clear whether any importance may be attached to the division. In no other account have I seen the name mentioned, but in the Gilgit country it is certain that a small number of families are of a caste called Ronu, and that they are held higher even than the Shin. It is possible that this rank is derived from their having in former generations held some offices of power, hence the caste could not be widespread...

According to informants in the region the members of this division are born of a ruling family on the male side but of 'commoner' origin on the female side.

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26 Barth, 1936a, pp.26, 40-1.
27 Drew, 1875, pp.423-4; Biddulph, 1930, pp.34-6.
28 Drew, 1875, pp.423-6.
29 cf. Biddulph, 1930, pp.34-6, who proposes other origins for this group.
Considerable importance is attached to 'purity of blood' among the royal families, and those who are not royally-born on both sides are clearly differentiated and rank between the members of the royal families and the uppermost 'common' class.  

Biddulph's observations appear to confirm this semi-royal status:

The esteem in which they are held is proved by the fact that they are able to give their daughters in marriage to the ruling families, and children born of such marriages are qualified to succeed to all the honours of the father's family, and intermarry with other ruling families. They also give daughters in marriage to Zinds ... but not to the inferior castes. They, however, take daughters in marriage from both Shins and Yeohuns. Children born of these unions rank as Rones ... Rulers of Pard States give their daughters born of slaves or concubines to Rones, but not those born of lawful wives.

They are not found at all in the districts where there has been ascenlalous organization. Nor are they now distinguished as a separate caste or class in Gilgit or Chitral, having become absorbed into the aristocracy, and having become fewer in numbers following the changes in the nature of autocratic rule in the Chitral and Gilgit valleys.

Social Classes in the Principalities

By the end of the 19th century the social implications of caste and kinship had already broken down to a considerable extent. The early writers did however recognize that the social system of the other principalities, especially under the Matores, were based on different criteria and embodied a more flexible hierarchy of classes. Even so, in all the principalities, actual division between social classes have been largely maintained by ban on the movement of women in marriage, and in this respect they therefore resemble caste divisions.

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30 Rone is said to be roughly the equivalent of Arghun, a semi-royal rank in Hunza. See also B.Lorimer, 1935, I, p.xiii. It is also said that the distinction of being Arghun is not permanent, and that after a few generations they become merged with the aristocracy.

31 Biddulph, 1890, pp.35-6.

32 E.g. Biddulph, 1890, p.62ff.
Society in Hunza and under the Katore has been described in the literature and it is clear that they share many similarities. Lorimer has defined the social divisions of Hunza which operated at least until the time of Partition and is only slightly modified now. At the top of the hierarchy are the members of the royal family, including first, the ‘royally-born on both sides’, and secondly the Aqzariwa, who are probably equivalent to the Sons of Gilgit. Then follows the aristocracy, "... 'The Great' – those who enjoy, or have the right to occupy superior offices in the State ... " and who do not work with their own hands. The third class

... cultivate their land and work with their own hands; but, if personally worthy, are eligible for appointment to posts by the Thans. They are not required to carry loads or perform any inferior class of work.\(^3\)

Below are those who carry messages for the ruler but are not required to perform menial tasks, while members of the fifth class are liable to carry loads for the ruler and to wash for gold\(^4\), or may alternatively be in the employment of the aristocracy. The sixth and lowest class are the Sericho (= Dobs), who provide the musicians and blacksmiths and also perform menial tasks such as carrying firewood for the ruler, doing plastering work, and serving as sweepers. Since Lorimer wrote, there has been some relaxation in this system; for example, those who work for the khan are now paid accordingly. Lorimer makes it clear however that, even in the early part of the century, there was considerable flexibility in the social organization of Hunza.

Flexibility is also a characteristic of Chitral society. Below the Sehatar and the royal family come a large privileged class, constituting about 20% of the total population, whose members are known as Adumada.

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34 D. Lorimer, 1935, I, pp.xlii.
35 See also Schomberg, 1935, pp.100-1.
Many Amasada families are of foreign origin; some are descendants or collaterals of the present or former ruling dynasties. The Amasada are traditionally distinguished from the lower classes on a number of points. They all occupy ancestral land. They do not, other than in exceptional circumstances, work with their own hands. Individually they have the paramount duty of loyalty to the Mehtar, and they are eligible to serve the state as police, governors, charwacos etc. It was members of this class who attended the Mehtar's court and the daily receptions.

Within the class, the social standing of an individual depended upon a number of considerations. Sainly ancestors or relationship to the royal family commanded the highest deference. Those who held important state offices or were of families that held such offices, were also entitled to special deference. Attention was given to individual and personal qualities, especially in fighting and in sport, riding, and hunting. An individual was also deferred to according to the extent to which he fulfilled certain charitable obligations among the lower classes living in his locality. Ultimately, however, an individual's social position, whatever his class, depended upon his relationship with the ruling Mehtar and upon his services and obligations to the ruler and state. This was given formal expression at the daily reception, where the Amasada who were attending sat in an order of precedence which was neither permanent nor clearly established. There was a court official whose duty was to make daily adjustments, and the Mehtar himself would frequently cause individuals to sit nearer or further from him, or would show his favour or displeasure in other ways. This made for social mobility.

Some individuals have risen in the scale by virtue of their personal relationship with the ruler, or by holding some state appointment, or as a result of political events. Over a period of years, others may be well to rise or fall in rank according to the general consensus of opinion. All informants agreed that socially-ambitious families of the middle class which were sufficiently wealthy, who served the state or ruler suitably, and whose members behaved appropriately, might rank as Amasada after two or three generations.

35 See also Schoenberg, 1934, p.211.
37 O'Brien, 1939, p. xii.
39 See also Scott, 1937, p.13.
The other two classes below the Adamsada are the Ruft, which is the largest class and whose members rank equally, and the Fakir Miskin.

Both Ruft and Fakir Miskin are composed largely of the Fakir Miskin also includes most of the smaller groups, e.g., the Rigan, the Hazagasht, the non-tribal groups of southern Chitral, the converted Kalash, and, at the bottom of the social scale, those who continue Kalash and the Ustadan (= Toms). Inter-class mobility, at least among the Fakir Miskin, is indicated by Schonberg's description of the Ruft as

... an amorphous middle class ... perhaps ... may be defined as those who, not powerful enough to be Adamsadas, are yet slowly rising into their ranks or else are sinking into those of the Fakir Miskin. The former, parvenus ... are occasionally classified as Arbabsadas ... 41

Other descriptions of the class divisions also indicate informality and the central position of the ruler.

Arbabsadas and Fakir Miskin are really all one class, the former are so called from being well off, having been repaid for services to the Mehtar, while the latter are the very poor class ... They will intermarry, though an Arbabsada would not give his daughter to a Fakir Miskin who was unable to support her. 42

Scott confirms that individual Fakir Miskin might be raised to the Ruft, and again mentions the necessary change in the nature of their obligations to the state. 43

The Ruft (or Arbabsada) are 'common people', but are entitled to deference for they are owners of land and for being independent of the Adamsada. Their obligations were directly to the state, whereas the Fakir Miskin were often the retainers of Adamsada. 44 Where they were not personal retainers, they had to perform menial tasks for the state, especially load-carrying and labouring. In the 19th century they were also liable to enslavement. 45

40 Siddulip, 1825, pp. 63-4.
41 Schonberg, 1938, pp. 213-4.
42 O'Brien, 1925, p. 18.
44 See also Schonberg, 1938, p. 216.
45 Scott, 1937, pp. 13-4; Ijarur-ud-Din, 1960, p. 49.
The formal distinctions between one class and another have become blurred since the tax and administrative reforms of 1953. The result of these has been that although the classes continue, their special characteristics vis-a-vis the state no longer apply.

The Status of Immigrants

Further illustration of the differences in social organization between the communities of Kurdistan is provided by the varying extents to which immigrant groups have been absorbed into their social systems.

Among the acephalous communities, there has been virtually no social integration of foreign minority groups. This is to be expected, given that reference to descent and kinship is traditionally the only criterion for a place in society, and is also the only criterion for rights to land. The two craftman groups (the Kames and the) and those of saintly status have had a place in the acephalous communities by virtue of the services they render or their ancestors have rendered, but even at the present time, in some localities, the craftmen continue to have no rights or permanent claim to land. The only other group of recent immigrants present in the acephalous communities are the Cuchars, who have occupied a 'niche' where they do not compete for resources with the dominant land-owning groups. It is clear from the relationships that exist in many localities that the Cuchars have been tolerated in certain limited circumstances only, and remain outside the political and social system.

In the principalities however, membership of society is not dependent on the sole criterion of descent, and many of the immigrant groups have been absorbed into the social hierarchy and have acquired cultivated land. The two processes are apparently concurrent. The rank accorded to immigrants appears appropriate to a local conception of their former status, rather than to their economic circumstances at the time of immigration or subsequently. For example, the Wakhii farmers of Aijal, who brought an existing social organization, have been equated, rank for rank with the traditional Buzza hierarchy. Bashgali headmen were received ceremonially at the Katore court in the 19th century, although conceptions of rank among the Bashgali were very different from those of Katore society. Immigrant craftsmen, of whatever origin, have been accorded low status e.g., the

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See e.g., Wiclef, 1959, p. 294.
Kashmiri craftsmen of Kaskrot, the metalworkers of Madaglasht, and the Pathan leatherworkers of Gilgit town bazaar who have immigrated within the last few years. Similarly, princes taking refuge from disturbances in their own state as princes wherever they go, even among the acrophalous communities. The Cajars, in consideration of their recent acquisitions of land in some localities are probably in the process of being absorbed into the social systems of Chitral, Gilgit and Jauri Kohistan. They are accorded low status; this may be partly because they have no formal system of ranking among themselves, but informally elect the wealthiest to be headmen; and partly because no cultivator would give his daughter in marriage to a nomad, whereas the reverse has occasionally occurred, and the idea has therefore arisen that the Cajars are of a lower rank or caste than the settled groups.

The smaller immigrant groups have adopted the social criteria of the society into which they have been absorbed. However, the Kalash and Bashqali, at least while they remained pagan, have continued in their own system of rank attainment, based on formal feast-giving and other procedures. Some similarity to such formal rank-attainment procedures are seen in Shinaki and Kohistan, where individuals attain status, within the limits of their caste and clan, by ostentatious feasting of the community at funerals and on other occasions. (See chapter 7 below.)

Many of the traditional social divisions, and the criteria which defined them, were already undergoing a process of transformation before the events of the 19th century brought a new range of outside influences and ideas to Kurdistan. Even those social systems which at that time were established upon sharply-defined traditional criteria are now partially disintegrated. Nevertheless, in all communities which have been studied, the close dependence of social system upon form of government can still be seen. Closely associated with political and social institutions have been the conventions which have regulated the distribution and exploitation of the major economic resource of Kurdistan - cultivable land.

47 Revd, 1875, p.433.
48 Midgulph, 1880, p.13 gives examples. See also Stein, 1929, pp.22-23.
49 See Robertson, 1894, p.203; Snayo, 1935, p.526.
# Table 6

<table>
<thead>
<tr>
<th>District</th>
<th>Average Size of Individually-owned Irrigated Land-Holdings by Districts and Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunza</td>
<td>1.5 - 2 acres</td>
</tr>
<tr>
<td>Nagar</td>
<td>c. 2.5</td>
</tr>
<tr>
<td>Gilgit</td>
<td>c. 3</td>
</tr>
<tr>
<td>&quot;Lower&quot; Chitral (Chitral town and all districts to the south)</td>
<td></td>
</tr>
<tr>
<td>&quot;Upper&quot; Chitral (Kohistan, Kohistan, Tarish, Turikhe, Yarkand, Lasepur, but excluding Baroghil)</td>
<td></td>
</tr>
<tr>
<td>Aulin</td>
<td>3 - 4</td>
</tr>
<tr>
<td>Ishkoman</td>
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<tr>
<td>Yasin</td>
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<td>Chupis</td>
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<tr>
<td>Gawri Kohistan</td>
<td></td>
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<tr>
<td>Paroghil</td>
<td>4 +</td>
</tr>
<tr>
<td>Ghilas Sub-Agency</td>
<td></td>
</tr>
<tr>
<td>Actor</td>
<td>Insufficient data</td>
</tr>
<tr>
<td>Kandia</td>
<td></td>
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<tr>
<td>Baltistan (1)</td>
<td>2.5</td>
</tr>
<tr>
<td>Ladakh</td>
<td>1.5 - 2.5</td>
</tr>
</tbody>
</table>

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1 The figures for Baltistan are based on data collected from informants; data about 65 specific villages and 71 individual holdings; unpublished data for Gilgit Sub-Division provided at the Ministry of Kashmir Affairs, Dehradun, and the Tehsil Office, Gilgit; Khalid, 1963, p.235, 27. Cf. Curzon, 1926, p.91; Iqbal, 1969, p.161; Iqbal, 1969, p.130. Khalid, 1963 gives 2.2 acres for Gawri Kohistan, but has discounted for land "wasted" by terracing. The sizes of holdings among the Kilde were adjusted where they are jointly owned by several farmers, and absentee and state lands are not included.

The limited 1961 census data that have been made available do not permit a precise average size of holding to be calculated, even for Gilgit Sub-Division for which the total cultivated area is known. No details are available about the division of the population between landowners, tenants and labourers, nor between agriculturists and the growing non-agricultural population of Gilgit town. The latter includes permanent and seasonal inhabitants, such as traders and officials. If the total number of those in Gilgit who are not members of landowning households is assumed to be 3,000, and if households are taken to average 5.6 members, then the average size of holding per landowning household is 2.4 acres.

CHAPTER 6. THE DISTRIBUTION OF IRRIGATED LAND

i The Sizes of Land-Holdings
ii Descent Groups and Rights to Land
iii Landowners under Centralized Government
iv Rights to Land in the Acephalous Communities
v The Allocation of Land to Immigrants in the Principalities

The Sizes of Land-Holdings

There is considerable variation in the average sizes of individually-owned land-holdings between the districts and communities of Dardistan. Published quantitative data relating to the present are very few, but, by using all available sources of information together with the data collected from informants, it is possible to obtain an approximate average size of land-holding for most parts of the region. (See table 6 opposite). The data are not sufficiently complete to calculate measures of dispersion, but the figures given in table 6 indicate an order of magnitude upon which all informants were agreed. How far it represents the situation at the end of the 19th Century cannot be shown in any detail, but it is likely that the order of the districts, in terms of relative sizes of holdings, was much the same at that time.

Data for the past are more scanty, except where districts were settled. For Gilgit and Astor it can be calculated that in 1915 the average sizes of holding were 4.0 acres and 3.7 acres respectively.\(^3\)

By comparison with the current average size of holding in Gilgit of 2.5 acres, there appears to have been a decline of nearly 40\% in 50 years, but of this decline about 13\% can be accounted for by the

\(^3\) Calculated from figures given for the agricultural population and cultivated area by Thakur Singh, 1917, p.43. See also Talbot 1916, p.6. Average members per household have been taken as 6.3 and 7.4, and were interpolated from Census 1911, XX, Part 11, p.220; Census 1921, XXII, Part 11, p.232. Thakur Singh himself (p.48) gives different figures for the average size of holding in the Wazirat (i.e. Gilgit and Astor together), but these are based on a total number of households that is incompatible with his own and with population census data.
continuing decrease in the average size of households. If allowance is made for this, then the annual decrease in holding-size is about 0.8%. An average decrease of this order is suggested also for the Gilgit valley and Chitral by data collected from 53 farmers. Of these, 27 reported that they are now cultivating holdings that are smaller than their fathers', and that these, on average, 40% of the size of their fathers' holdings. 18 farmers reported holdings of the same size, and 8 reported a holding larger than their fathers'. Overall, the changes represent a decrease in the average size of holding of 20% in the span of one generation. If 25 years are allowed between generations, this is equivalent to an annual decrease of 0.9%. All informants stated that this is to be accounted for by a rate of growth of population that has been more rapid than the rate of extension of the cultivated area.

The census data indicate that both in Chitral and in the Gilgit Agency as a whole (but excluding Dareal and Tangir), the population doubled in the 50 years beginning 1911. See table 4, opp. p.54). This suggests an overall average rate of increase of 1.4% per annum. The data are insufficiently reliable to demonstrate consistently varying growth rates between districts, although it may be noted that the rate of increase in Chilas does appear to have been lower than in the principalities. Much of the rapid growth of early years, for

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4 The most recent figure available for the average size of household in Gilgit is for 1941. At that time, Gilgit households contained an average of 5.9 members: Census of India 1941, XXII, "Jammu and Kashmir", Parts I and II (Essay and tables) p.377. This and the 1911 figure have been extrapolated to give a current average household size of 5.6.

5 It has been suggested above (p.54) that a small part of this increase can be attributed to immigration, the presence of outsiders and improved enumeration, but that by far the greatest part has been growth in the existing population. This is supported by the evidence of older informants in the region and by the data available for specific villages. The most complete series of population figures for specific villages which are available are for Astor; these are set out in appendix I, p.275.

6 It is possible that this has been connected with the incidence of blood feuds, which may not only raise the death rate, but also lower the birth rate. Jettmar, 1961, p.86 has suggested that in the early decades of the century, after inter-community conflicts in Shinaki had been prevented there may have been "...even more killing than before...but all inside each valley."
example in Ishkoman and parts of Gilgit, may represent recopulation by returning slaves and refugees. Several authors remarked that the advent of peace and security had begun to encourage population growth.

In Gilgit, between 1915 and 1947, there was an increase in the total cultivated area of 2,827 acres, equivalent to a rate of annual increase of 0.9%. Between 1947 and 1963 the increase was 1,919 acres, i.e. 1% per annum. Again, it is not possible to show how far this represents the rate of increase of the cultivated area in other districts, but it is comparable with the current rate of increase of the irrigated area that Israr-ud-Din has suggested for Chitral.

Thus it is probable that in most of the region the rate of increase of population during the 20th Century has exceeded the rate of increase of the cultivated area by about 40%. At the turn of the century, holdings were probably at least half as large again as at present.

The present variation in the average size of holding, for example as between Hunza and the communities of the Gilgit valley, is probably to be accounted for by historical events. The first half of the 19th Century was a time of dynastic change, warfare and depopulation for Gilgit and Astar. It was only after the firm establishment of Kashmir rule that peace and security were restored.

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7 See also Biddulph, 1880, p.139; Thakur Singh, 1917, p.45; Curzon, 1926, p.182.
8 E.g. Conway, 1894, p.252; Neve, 1913, p.151; Stein, 1921, I, p.41.
9 From Thakur Singh, 1917, p.43; unpublished data provided at the Tehsil Office, Gilgit.
10 Unpublished data provided at the Tehsil Office, Gilgit.
11 Israr-ud-Din, 1965, p.178.
13 Kashmir rule was established in Astar in 1842, but raids from Chilas continued to prevent resettlement of some outlying localities until the end of the century. See Drew, 1875, pp.398-9; Conway, 1894, p.107; Neve, 1913, pp.125-7. In Gilgit it was not until after the death of Gohar Aman that Kashmir rule was firmly established: Aldar, 1963, p.102.
commented:

Whatever the faults and shortcomings of Cashmere rule...it has undoubtedly conferred on this part of the country...prosperity and security....

It was not until the 1890's that law and order were similarly brought to the Kushwagte territories. Stein remarked of Yasin:

The scantiness of the present population is ascribed...to oppression and misgovernment, and that this has been long continued is sufficiently clear from what we know of the Kushwagte rule during the last two centuries.

No added:

The effects of this misrule, as far as number of the population is concerned, have been rude, no doubt, still more lasting by the devastation and wholesale slaughter accompanying the two Dogra invasions of 1860 and 1863...

Enslavement continued until the 1890's, and there were further dynastic wars and disturbances in the period between the death of Gohar Aman and the ascendancy of the Katore in Yarkhun and Yasin. Yarkhun remained almost completely uninhabited throughout. It was not until the turn of the century that, as Stein observed in Yasin and Yarkhun, the population began to expand and cultivation began to be extended.

In the Katore territory conditions were more favourable. Aman-ul-Mulk was firmly in control during the second part of the 19th

14 Biddulph, 1880, p.139.
16 Stein, 1928, I, p.39n.
17 See e.g., Durand, 1900, p.51, who describes an instance that he observed in 1888.
19 Biddulph, 1880, pp.32-3; Longstaff, 1950, pp.206-7.
20 Stein, 1921, I, pp.50, 52; Stein, 1928, I, pp.42-3.
Century and there was little external warfare. Internally however there was the constant possibility of enslavement for the Fakir Miakan, and the numbers of those who were enslaved sometimes reached several hundreds in a year. Among the northern principalities it was in Kunza and Nagar that there was, relatively, a greater measure of security for life and property. The rulers did not enslave their own populations and the valley was immune from external attack.

Thus, so far as the historical material makes it possible to compare the experiences of different districts in the 19th Century, it can be said that conditions for population growth were most consistently favourable in Kunza and Nagar. In Gilgit and Astor, conditions having been unfavourable, there were changes at least a generation earlier than in the Khuwarta territory. By the end of the 19th Century the sizes of populations in relation to their aggregate cultivated area were attracting comment in Kunza, Nagar, Gilgit and Astor: it is in these districts that holdings now appear to be smallest. In Yarkhan, and especially in Yasin, Ishkoman and Gupis, the population has remained smaller in relation to the cultivated area: the events of the 19th Century continue to be reflected in the larger average sizes of holdings in these districts.

Apart from the statistical limitations of the data itself there are environmental and other variables which also partially invalidate quantitative comparisons of holding sizes as between one district and another. The irrigated land of some villages is more productive than that of others, due to a number of physical variables, among which are soil composition, aspect and insolation, altitude, precipitation and the adequacy of sources of irrigation water. To isolate the effects of these we require exceptionally precise data: the general conclusion from existing data is that the effects of such variables,

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21 See e.g. Raverty, 1864, p.133; Montgomerie, 1872, pp.186-7, 199.
22 Munphool Meer Mooneshee, 1869, p.130; Marsh, 1876, p.120; Lockhart and Woodthorpe, 1889, p.86; Gohold, 1900, p.302.
though locally significant, appear in aggregate, when districts are considered as wholes, to be evenly spread.

More important is the presence or absence of complementary resources. Where manure or water is lacking, land may be left fallow. Of 21 villages for which data about following are available it was reported in 5 that 20% or more of the total cultivated area is left fallow each year. In the south of Chitral, and in some Tibetan localities, there is the additional category of individually-owned land that is not irrigated, but which may be cultivated when climatic conditions are favourable. In Ashyret, where the average size of irrigated holding is 2.8 acres, it was reported that landowners have an additional 2 - 2.5 acres of rainfed land, which most of them have been about five times in the previous ten years. In very few villages, even in the south of Chitral, does such unirrigated land contribute significantly to agricultural output.

Another complicating variable is the range in the size of holding in any one district, with which may be associated the proportion of the population who have no land and who consequently are not represented in table 6. The large 'estates' of some members of the ruling

...
families and aristocracies of the principalities are extreme items in the range of size of holding, and very occasionally exceed 100 acres. The cultivation of these estates is done by servants and tenants, a few of whom have no land of their own, but who mostly have small holdings that represent the other extreme in the range of size of holdings. Agriculturalists who own no land at all are rare in the principalities, with the exception of the non-Kho localities of the south of Chitral. There, and in the scrophulous communities, the proportion of landless in the population is much higher, reaching 40% in some villages. Nearly all the landless are employed as agricultural labourers, and they and their dependents are supported from the agricultural resources of the district in addition to the landowners and their dependents. Thus despite the larger average size of individually-owned holdings in Shinaki, the overall ratio between total population there and the total area of irrigated land is nearer the regional average than appears from table 6.

Descent Groups and Rights to Land

Much of the pattern of land occupation and of rights to exploit natural resources had its origins in the movements of the large 'tribal' groups, such as the Shin invasion, the Kho expansion and the Yusufzai conquest of Swat. The tribal groups were subdivided into descent groups or clans and the territory allocated between these, probably according to their relative military strengths. Tradition provides the example of three Shin 'brothers' who divided the Chilas and Buner valleys, the Gor district and the Thak valley between themselves and their descendants.

In few districts have such ancient divisions remained unaltered. In the principalities governmental institutions have supervened, while in much of the south the pattern was complicated by the introduction, at the time of the conversion, of the particular land-holding system of the Yusufzai of Swat. In a few localities clan

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25 According to Thakur Singh, 1917, p.84, 90% of the irrigated land of Gilgit and Astor was being cultivated by proprietors in 1915.
settlement remains recognizable, e.g., in Horamosh, 26 whose remoteness and inaccessibility minimized the influence of the centralized government at Gilgit and allowed the old settlement pattern to survive. And in Baltit, the original centre of the Hunza Purusho, where each clan remains geographically separated and receives its irrigation water as a group. Although land is now individually-owned in Hunza, the clans have retained their original territories in Baltit by alienation procedures that do not permit members of one clan to occupy the territory of another. 27 In the villages more recently settled by Purusho the members of different clans are intermixed. 28

The breaking down of the geographical associations of descent groups has gone furthest in those principalities where the ruler had control over the allocation of all land. In that situation the larger descent groups are not now associated with any particular territory, although at family or lineage level descent remains relevant, partly because of alienation and inheritance procedures, and also by virtue of conventions such as those that favoured continuity of occupation of ancestral land among the aristocracy, as under the Kates. Informants from all districts stated that, in the past, in the rare event of an individual wishing to dispose of his land, he offered it first to his brothers and then to close male relatives. The adoption of the Sharifat Law by Sunnis and Shias during the present century has begun, in many localities, to weaken both this vestige of descent organization and also the practice which has hitherto ensured inheritance of land through the male line only.

27 See also Schomberg, 1935, pp.130-1.
28 Other vestiges and traditions of clan settlement and division of land, pasture and irrigation water are mentioned by e.g., Lonsatoff, 1930, p.203; Snoy, 1962, p.50; Jarrar-ud-Din, 1965, p.108. In many villages where water is rationed, cultivators receive water in turn. Where the descent settlement pattern has broken down, and where fragmentation of holdings has occurred, they may own fields in various parts of the village and be obliged to water all these at the same time, which necessitates water flowing in several different channels and results in greater wastage through seepage and evaporation. Where clan or descent settlement survives intact - as in Baltit, Haramosh, and as reported in Diglot village in Tangir - a cultivator's fields are at least closer together. Ideally, each part of the cultivated area is watered at a time, irrespective of individual ownership or manurct of plots; in this way wastage of water is minimized.
Pakistan:

Land in the pre-partition customary law always tended to be concentrated among the agnate male relatives, but in the Shariat Law of Inheritance, the tendency is towards the decentralization and dispersion of property by crossing the bar of patrilineage, that is the right of daughters to inherit it, and after their death the property would not return to the estate of the daughter's father, but would be shared by her offspring and husband.29

These trends are further obliterating what remains in the principalities of the ancient patterns and exclusive rights of descent organizations, and are making for a greater degree of flexibility in the utilization of land. In the acausal communities the traditional procedures remain largely unaltered.

Landowners under Centralized Government

Superimposed on the ancient descent settlement pattern have been the institutions of the principalities. Under 19th Century Katora rule, if not at earlier times, it is evident that the ruler had paramount rights over all land and other resources. That these rights were then explicit was attested by several observers.30

All land belonged, in the final instance, to the Mehtar...the duties associated with any specific piece of land were to be regarded as payment...for temporary usufruct rights...as the ultimate owner of the land he had the right...to evict anyone at any time.31

31 Barth, 1956a, pp.81-2.
Information collected in Chitral suggests that in practice much ancestral land was confirmed in private ownership, at least among the Adamzada and Yuft. Where succession within influential Adamzada families was concerned, the ruler might interfere if he favoured one of several contenders, but it was unusual for ancestral land to be removed altogether from the possession of a lineage. Even those Adamzada who were not supporters of the ruler were not necessarily removed from their land, although they would have had to relinquish any office of state. Younghusband remarked that although the Mehtar's powers were apparently despotic, he was "...held within very close bounds in certain directions by custom...". Where execution or banishment did befall, the land was usually allowed to remain in the possession of a relative, close or distant. When the Mehtar's disfavour had lessened, a dispossessed man was often successful in reclaiming possession, and a succeeding Mehtar often re-established a traditional line of ownership that had been interrupted by his predecessor. Similar principles thus remained as for appointments to state offices.

At lower levels in the social hierarchy less consideration was given to ancestral continuity of occupation of land. The...

...chiefs' practice of selling their subjects as slaves...must have carried insecurity into the humblest household.

In addition to enslavement the Fakir Miskin and less influential Yuft were at times liable to eviction, both by the ruler and by other members of the ruling family, and there persist in Chitral many grievances concerning land that had their origin in eviction and

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32 Younghusband, 1895a, p.491. See also Curzon, 1926, pp.131-3. The Mehtar's powers were in some degree curtailed at the end of the 19th Century; see Scott, 1937, p.70.
33 A characteristic example was encountered. A dispute in the early years of the century between the Mehtar and an Ismaili leader over the payment of unahr by Ismailia resulted in the latter's exile. His son subsequently returned to Chitral and has attempted to recover his ancestral lands.
34 Aurel K. Stein, Ruins of Desert Cathay, etc., London, 1912, p.33. (for full title see bibliography).
appropriation of land previously in the hands of lower-class farmers.\textsuperscript{35} Those who were dispossessed were obliged to become tenants or servants, or, if any land was left to them, to subsist on the smaller amount, or, if possible, to extend irrigation to barren land.

Insecurity of tenure was also and inevitably attached to mehrbani land, for its usufruct was a temporary benefit. The taking of this land from one recipient and awarding it to another appears to have given rise to further land disputes, many of which remain unresolved.\textsuperscript{36} Although Adamzada lineages as such were relatively secure in their occupation of ancestral land, so far as individuals were concerned, whether landlords or cultivators, there was little security of tenure under the Katore. Insecurity lessened after 1895, but it is only with the new constitutional arrangements made in 1953 after Chitral had acceded to Pakistan that individual ownership with full proprietary rights has become generally accepted and explicit.\textsuperscript{37}

The position of the individual land-holder vis-à-vis his own government was probably less favourable under the Kushwante in the 19th Century as a consequence not only of enfeoffment but also of dynastic struggles and the absence of effective administration. Similarly in Gilgit up to 1860 security of tenure must have been very

\textsuperscript{35} In three widely-separated villages it was reported that in the early years of the century, but within living memory, a prince with estates nearby had dispossessed the villagers from land.

\textsuperscript{36} Under the present law those who were awarded mehrbani land after 1843 may have their occupation contested. Unofficial estimates were made in Chitral in 1963 by Government officers that the ownership of nearly half the irrigated land in the state is in dispute. While this may be an exaggeration, it does indicate much uncertainty over rights to land, often with unfavourable results for agriculture. An instance was recorded where, as a result of uncertainty over the ownership of a large area of barren mehrbani land, the present occupant, who has held possession of it for many years, is reluctant to irrigate and cultivate it for fear of incurring litigation.

\textsuperscript{37} Israr-ud-Din, 1965, p.128.
precarious, and only after 1893 was there a permanent "...inducement
to the people to settle...(and) enjoy the fruit of their labour...". 38
So far as their own governments were concerned, it is likely that the
farmers of Hunza, Nagar and Punial were more secure in the possession
and cultivation of their own land. The ‘Hira’ rights to the lives and
property of their subjects were limited, although individuals who were
disloyal or failed in their obligations might be banished.

Rights to Land in the Acephalous Communities

In the acephalous communities, territorial rights were held by
the descent groups of the higher castes; only those who were members
of the appropriate castes were entitled to a share in the possession
of land. Where one caste was dominant its share was larger in
proportion to its numbers – for instance, in Gor, where Shina are
dominant, the average size of holding of Shina is larger than that of
Yeshkuns.

In some localities, especially those exposed to outside influences
during the 20th Century and where the local jirgas have lost their
authority, the older exclusiveness has now partially broken down, but
in many communities immigrants have continued up to the present time
to be strictly debarred from acquiring rights to land, and even Dom and
Kamin lineages settled on land for many generations may have no
permanent rights there – as, again, in Gor. Given his right to land
by his descent, there was no superior authority that could deprive an
individual of this; only in the rare circumstance of banishment from
the community following an offence was land forfeited. The land of
individuals killed in feuds passed according to the customary processes
of inheritance.

In several of the acephalous communities, and possibly in all of
them, the settlement patterns and land-holding systems were modified
at the time of the Islamic conversion, when a number of institutions
were introduced from Yusufzai Swat. The former scattered settlements

38 Thakur Singh, 1917, p.82. Similarly in Astor: see Curzon, 1926,
p.163.
on the hillsides above the cultivated area that existed in Shinaki and in Southern Chitral were abandoned, and the population came together in fortified villages that were established around mosques which had themselves been newly built near flowing water and on the valley floor. Jettmar has suggested that some previously cultivated tracts may have been abandoned at the same time. More important for agricultural activity was the new system of land-tenure.

Under this, rights to land continued to be vested in the descent group as a whole, but the rights of an individual to a particular plot were limited to a period of time, at the end of which the plots were re-allocated. Barth has described how this system formerly operated in Indus Kohistan.

The descent group owns the rights to land in common, and the problem is to achieve an equitable distribution between its component members. Since no two plots of land are really identical, a semipermanent division can never be fully satisfactory. Instead, the land is subdivided into blocks corresponding to the segments of the descent group, and each segment occupies each in alternate or rotating fashion. Thus each segment will, by the completion of the cycle, have occupied all the different areas an equal length of time, and full equality is ensured. Within each segment, land may be subdivided into lots according to the size of the household, or, as among the Pathans, according to the adult male's traditional share of the total. Thus, a person does not own particular fields, but a specified fraction of the common land of his lineage segment, and at the end of each standard period, he moves with his segment to a new locality allotted to it, where he again is allotted fields corresponding to his share of the total, to be utilized in the next period. In the same way, not land, but a specified share of the common lands is passed on as inheritance from father to son.

The tendency in the Kohistani area has been towards more and more permanent settlement and division of land. Thus, shortly before the memory of the older inhabitants, all land was held on this temporary basis; while at the time of enforced settlement by the Wall of Swat (in 1948), only a part of the agricultural area - but all the summer grazing areas - were subject to re-allocation.

40 A similar process of downward movement from the Kalash settlements is observed at the present time when Kalash individuals embrace Islam.
41 Jettmar, 1960a, p.134.
42 As might be expected, this system was also practised by the Yusufzai of Dir: Morgenstierne, 1932, p.27.
43 Barth, 1956a, p.32.
Jettmar reports that wash was being practised in Dareh in the 1930s, and remnants of it and of the settlement pattern associated with the missionaries survive in Tangir, where the settlement pattern has, since the abandonment of wash, been changing once more. If, as Jettmar concludes, wash was introduced as a concomitant of the new religion, then it probably also operated in the other communities that were subject to the same missionary influences. Information collected about Gor suggests that the settlement pattern there is similar to that described by Jettmar for Dareh, and a system there of drawing lots for the order of turns in taking irrigation water suggests a mechanism for distributing resources equitably among the land-holders. On the other hand, there is no relic or tradition of wash in Swat Kohistan, nor was it recollected in southernmost Chitral.

Even in Indus Kohistan and Dareh, where wash lasted longest, it can only have been practised for 8 - 10 generations. Nevertheless, its introduction at a time of profound change, including, in some localities, initial military conquest by the missionaries and resettlement, must have assisted in its establishment and the rapid acceptance of its implications for individual ownership, investment and cultivation. Wash appears to have perpetuated those features of a land-holding system based primarily upon descent organization which made for inequality of distribution of resources among the population as a whole and for failure to exploit opportunities. Barth, in writing of wash as it operated among the Yusufzai, has described the way in which the reallocation prevented any local arrangements for the transfer of land between farmers, and he, Stein and Fautz have recorded the absence of long-term improvements to land under the system. One of

45 Jettmar, 1960a, p.130.
47 See also Barth 1956a, pp.59-60, 69; Fautz, 1963, p.93 and passim.
48 In Dir wash continued at least until 1929; Morgenstierne, 1932, p.2
50 Stein, 1929, pp.52, 109; Barth, 1959, p.66; Fautz, 1963, p.95 ff. Stein, 1929, p.110 has suggested that wash has been a cause of feuda.
the reasons for which wesh was abolished in Swat by the wali was its deleterious effect upon agriculture. 51

Under the system of distribution among the Yusufzai some land was withdrawn from the cycle of re-allocation, and was permanently set aside for special purposes. Some of it was granted to 'saints and mediators', and some was "... temporarily allotted in return for services by non-landowners such as the village carpenter or blacksmith...". 52 Such grants did not alter the total number of shares held by the descent group; the loss was equally distributed.

Similarly the accephalous communities, the Pathan missionaries and their descendants—Mian and Seyeda—have been allotted land in perpetuity, e.g. in Indus Kohistan 53, in Darel and Tangir 54, and in the Niat valley. Similarly also, Kamina and Dome and other craftsmen have been granted land in return for their services, but with temporary usufructuary rights. Communal rights among the landowning castes and restrictions upon alienation made necessary the consent of all members of the descent group before any land could be transferred outside the group. Where this did occur, every member of the group was affected in that his own share was thereby reduced. Thus only those whose status or services were universally respected or required were adopted and granted land, either permanently or temporarily, and so, unlike the principalities, there was no mechanism for rewarding servants and labourers with grants of land. This exclusiveness, together with the xenophobia and turbulence of the accephalous communities has debarred all but the saints and those whose crafts and skills are regarded as necessary.

In the present century there has been some relaxation of the exclusiveness of settlement, especially in the smaller and intermediate

51 And for the same reason Pakhtun Wali discouraged wesh during his reign in Tangir and Darel.
52 Barth, 1959, p.66.
54 Jettmar, 1960a, p.133.

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valleys that had become depopulated during the inter-community conflicts. Gujars are now settled as cultivators and pastoralists in many of these, and also at the heads of the Kandia and Utrot valleys. In many localities they do not have full rights of ownership, which would include rights to pasture, and pay annual rent accordingly. Nonetheless in the more xenophobic of the major communities there continues to be little possibility of members of other groups acquiring land. In Gor no stranger - labourer, trader or pastoralist - is permitted to enter the central inhabited part of the settlement, and a similar prohibition is reported from Darei. The Gawri have recently re-asserted their corporate claim to all land in Kalam village. Similar conventions control the irrigation of barren land. This is also communally owned by descent groups, and its exploitation requires at least the agreement of the jirga concerned. If this is achieved and a channel built, there follows a division of the new land among all those entitled to a share. An individual may not irrigate barren land on his own account without making appropriate compensation. For example, in Gor it is possible for individuals with rights to land to irrigate an area of barren land, but one who does so can obtain possession only by purchasing the shares of all others with equal rights to it.

55 Jettmar, 1961, p.86.
56 Gujars appear to have been settled in Gawri Kohistan for several generations. In 1878, at the time of 'The Mullah's' visit, they were also present in Kandia as pastoralists, but had no land there. "'The Mullah's' Narrative of his Journey up the Swat Valley" etc., General Report on the Operations of the Survey of India, etc., Calcutta, 1880, p.xxvii. (for full title, see bibliography).
57 Wichte, 1958, p.294. In the upper Darei valley Gujars have been permitted to settle and cultivate on fields leased from the Darei, but such an apparently anomalous arrangement originated during the period of centralized government between 1905 and 1917, when these Gujars were settled at the instance of Pakhtun Wali, then ruling these two valleys: Wichte, 1958, p.294; Jettmar, 1960a, p.133.
58 This has occurred since Barth's observations were made: cf. Barth, 1956a, p.60. See below p.234.
The Allocation of Land to Immigrants in the Principalities

The adoption of immigrant groups and craftsmen has proceeded further in the principalities. Many have acquired permanent rights to land, and have taken places in the more heterogeneous societies that developed under centralized government. Those of mainly status have been allotted lands in a number of localities; for example, the lineage of the Ismaili Pirs of Chotorkhund, the ancestor of whom immigrated from Bokhara about 1860, have been settled in Ishkoman with a grant of land from the Kushwaqte rulers. Several groups of craftsmen have been encouraged to immigrate and provide their services. As with other inhabitants, the craftsmen's place in society and their rights to land have depended ultimately upon their relationship with the ruler. Where they were brought specifically to provide a skill or a service they were usually granted land to cultivate and on which to found a village. Such land was usually barren, and was therefore readily in the gift of the ruler.

The rights which the craftsmen acquired appear to have been as permanent and complete as those of other cultivators of the same social class; i.e. their continuance depended upon the fulfillment of certain obligations to the state, which in the case of the craftsmen were primarily to practise their special skills for the service of the ruler, his administration, and the community. This settling of craftsmen in villages of their own was in contrast to the practice among the seephalous communities, where craftsmen were attached in small numbers to villages of the land-owning castes and were often housed on the village periphery.59 Doms have been settled in villages in several principalities - at Domial in Gilgit, at Domial in Nagar, at Barishal in Huna 60, and at Danin and elsewhere in Chitral. Similar instances are the Kashmiri craftsmen at Kashrote and the metal-workers at Madaglasht.

In addition to those bringing special qualities or skills, some solely agricultural immigrants were granted land in the principalities.

59 Wiche, 1958, p.289.
60 D. Lorimer, 1939, pp.5-6.
During the 19th century and earlier, where irrigable barren land was available, it was in the interests of states to settle such groups, and to add to their total populations, to their military strengths and to the state revenues. During the present century, Wakhi have been encouraged by the Chitrál government to immigrate to Barochil with a view to increasing the state revenues, and were granted initial concessions to assist their settlement. In some instances there may have been further advantages in settling immigrants close to the border over which they had come. The Kashkuli were granted land at the heads of several valleys in the south-west of Chitrál, so that trans-border raids by their own kinsmen from Nuristan might be discouraged; their specific obligation to the Chitrál government was to prevent such raids.

The incorporation of all alien groups has been closely linked with the granting of land to them. In no part of the region have immigrants, even those with special craft skills, supported themselves solely by the practice of their skills. For the acquisition of land, and for social integration, conditions were probably most favourable under the Katore. Centralized government was well-established, internal order generally prevailed, the ruler had full and explicit rights over the allocation of land, and, in addition, there was probably relatively more irrigable barren land available, at least in the 19th century. Agricultural immigrants were also settled in other principalities, e.g. Gujars in Gilgit and Wakhi in Hunza.

Subsequently, under the Kashmir, British-Indian and Pakistan administrations, a number of additional localities have been allotted to immigrants, e.g. upper Ishkoman to Wakhi refugees, upper Astor to Kashmiri and, more recently, Pari village to Kashgari. The conditions necessary for such settlement have been the existence of barren land, and the presence of a ruler or administration with sufficient authority to grant it to outsiders, notwithstanding any existing rights to it held by the established population.

61 See also Morgenstierne, 1932, p.42.
It was not only groups of immigrants who sought land and a site for a village. Among the aristocracy, individual refugees fled from one principality to another or entered from neighbouring countries. Such people attached themselves to the court or to a subordinate governor’s retinue, and gave military or other service, in return for which they were often rewarded with a grant of land. In this way a refugee from Gupis who entered the service of a Katora Mehter, and who was killed fighting for him, was posthumously granted the land on which the village of Bilpok was founded by his descendants. Similar traditions exist about the founding of several villages.

Nor have all those who have insufficient land been immigrants; many farmers have lost their land through natural disasters, eviction or have found it progressively fragmented and subdivided among brothers. In contrast to the situation in the accephalous communities there was often an opportunity for individuals to obtain land or to add to a diminished holding. The extension of irrigation to adjacent barren land by a village or a number of cultivators required, and continues to require) the consent of the ruler or administration. This has normally been given freely with a view to increasing the total cultivated area and its revenues. Such an operation is organized by the Lambadar or charwelo, and all individuals who contribute labour, materials or finance receive a share of the new land accordingly. Sometimes a ruler has initiated and financed the construction of a new channel and has then rented the land to tenants. This has also occasionally been done by members of the aristocracy, who have presumably usurped rights to the land or been granted them by the ruler; for example, all the irrigated land at Hopar is owned by members of the aristocracy of Punial who rent it to Gujar tenants.

A second means by which the landless of the principalities, or those with small holdings, have been able to acquire land has been by long service as a servant or labourer for a landlord. A common way of rewarding such service was to grant the usufruct of two or three

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62 For examples, see Stein, 1929, pp. 22-3; Schomberg, 1935, p. 269; Schomberg, 1938, p. 167.
63 For examples, see Schomberg, 1935, pp. 43, 138-9.
fields, which the servant was allowed to cultivate as he chose. After a number of years, such awards have frequently been made permanent. The present Mir of Hunza and the Ra of Purnul have given parts of their own estates to servants, and this was reported to have been a common practice in the past in Chitral, among the Ademzada, and elsewhere. In these ways, the poor, the landless and the refugees in the principalities could look for assistance from the officers of state and the aristocracy.

These procedures played a part in distributing natural resources and agricultural assets among all sections of the populations of the principalities. Although the wekh system was based on the principle of equal shares in agricultural resources among the landowning castes and groups, the monopoly of these groups excluded a section of the population from any share at all. In the principalities there has been a wider range in the sizes of holdings but, under the Katore at least, the qualification for some minimum share in resources became simply residence within the state. Not only was society more mobile, but the control and exploitation of all economic resources was more flexible and more efficient than under the caste monopolies.

64 See also Israr-ud-Din, 1965, p.74n.
CHAPTER 7
THE USES OF WEALTH

1. Agricultural Assets
2. Conspicuous Consumption in the Asephalous Communities
3. Non-productive Assets in the Principalities

Agricultural Assets

Within the 19th and 20th centuries at least, and probably in earlier times, opportunities for saving among cultivators have been limited by levels of income that appear always to have been low and which, in the first half of the 20th century, may have even declined in some localities. Where individual labourers or cultivators have saved and used the savings to add to their capital assets, such investment has almost invariably been in land, livestock or trees. The choice between these has depended upon local circumstances, and it appears that considerations of relative productivity and of risk have also been important whenever any choice has existed, but even in the principalities opportunities for individuals to choose to add to their land-holdings have been limited.

Khalid Ashraf, 1963, p. 112; has obtained an average of current incomes for cultivators in Swabi Kohistan by calculating the product of the total yield of each individual's holding and current prices. The per capita average is Rs. 139. While this may represent some minimum average level of individual income, it does not take into account income derived from livestock-maintenance, which is a considerable omission. Nor does it take into account income from horticulture and non-agricultural sources, although these are of small importance in Swabi Kohistan. This method of calculating income is not generally applicable in the region because of the imperfections of the market in agricultural products. Cultivators in adjacent districts might produce and consume equal amounts but be found on calculation to have widely-varying incomes due to local price differences. For example, in Gilgit town wheat may sell at Rs. 25 per qammt; while in the same season the price at the head of the Gilgit valley may be Rs. 12, the differential being explained by the high costs of transport.
Of 53 farmers of the principalities, none of whom were first
generation immigrants or had been labourers or servants (i.e. who had
all inherited at least a small holding) only 3 had acquired additional
land since inheriting from their fathers. In 4 cases it had been barren
land, for which they had paid nothing or a nominal sum, and in every
case the area added was small. How far this represents the traditional
situation cannot be shown. Irrigated land was less readily purchased
in former times, when alienation was more closely restricted, but it is
probable that irrigable barren land was formerly more plentiful.

Investment and disinvestment in livestock have been less limited;
livestock are not subject to restrictions upon alienation or to other
controls, they are movable, and are much more divisible, but in many
localities the extent of pasture is small, and there are often additional
limitations imposed by the supply of winter fodder. In some localities
there are conventions by which trees standing upon one farmer’s land
may be the property of another, which makes possible occasional changes
of ownership of trees between neighbours.

It is apparent that cultivators’ wealth has been almost exclusively
in the form of agricultural assets. It also appears that at least up
to 1900, and with the possible exceptions of certain legendary ‘times
of abundance’, the aggregates of irrigated land and of arable output in
each district have increased or decreased roughly according to fluctua-
tions in the size of the population there. This is the usual situation
in peasant societies, one of whose characteristics is that they do not
achieve net capital formation.2

It is almost true to say that ... agricultural production
increasing only at the same rate as population, is the character-
istic mark of a peasant community.3

2 Raymond Firth and B.S. Yamey (ed.), Capital Saving and Credit in
Pestant Societies, etc., London, 1964, p. 20ff, (for full title,
see bibliography).

3 Colin Clark and Margaret Haswell, The Economics of Subsistence
As in other peasant societies, there are considerable inequalities of wealth and income in Dardistan. At the bottom of the income scale are the agricultural labourers of the asephalous communities, who have had no opportunities of acquiring land or other associated rights. Jettmar has described the depressed economic circumstances of labourers in Tangir and how competition for employment causes them to work for farmers on most unfavourable terms, so that they are often reduced to a state of 'debt-slavery'. In such circumstances a labourer may own no property and may occupy a house belonging to his employer. In the north, and in most parts of the south, it is however more common for labourers to own at least a milch cow or two, some domestic goods, and a house. At the other end of the income scale are the wealthier farmers and landlords, some of whose agricultural incomes may be considerably higher than the average. It is in saving and consumption behaviour at this level that there is a wider range of possibilities, and it is here that there is a conspicuous difference between the asephalous communities and the principalities.

*Conspicuous Consumption in the Asephalous Communities*

In the principalities most cultivators accumulate small stocks of food for annual festivals. For those connected with the agricultural cycle - seed-sowing, harvest etc. - the emphasis is upon the preparation

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4 Jettmar, 1961, p.34; see also Jettmar, 1960a, p.126.
5 Whatever the convention about the inheritance of the parental house, it has been customary in all communities for brothers and relatives to assist in the construction of houses for those who do not inherit the ancestral house. Informants agreed that where neighbours' and relatives' labour is employed and no payment involved in accumulating stone and timber - i.e. the traditional arrangement - then the cost of constructing a house lies only in feeding the unskilled labour and sometimes in paying a skilled carpenter. At current prices, this may not exceed Rs. 100. Therefore a house does not necessarily represent a large investment, nor does there appear to have been much variation in expenditure among those cultivators whose houses were built to the same plan and style. See also Census 1941, LXII, Part III, p.521.
of some local delicacy and upon sporting activities, rather than upon lavish expenditure and the consumption of large quantities of food. Among the Barucho grains of higher quality (especially wheat), which are necessary for such festivals and for other hospitable obligations, are set aside at the time of harvest, and are carefully rationed for 22 months in advance and preserved for the appropriate occasions. Nevertheless, even such deliberate hoarding is so regular an as universal that it is to be regarded as part of current consumption, as also are accumulations for annual religious events, such as Aid-ul-Adha, and for karwalo, both of which may be the occasion for the slaughter of livestock. Among the Kalash there are a greater number of annual festivals, some of which may involve the slaughter of livestock at the instance of the shaman; since this, when it is ordered, is indispensable, it too can be regarded as part of current consumption. In Khyber, the strong missionary influences have apparently obliterated the festivals of the agricultural calendar; in Shinak some survive, in name at least, but are declining in observance.


7 The Barucho divide the remainder of the harvest between storage bins, each part for consumption in a period of time. If there is any deficiency, it is made up in advance at that time, and a woman who is skilled in the management of grain stocks is greatly esteemed. This rationing and advance allocation was frequently cited in the region as an example of the frugality favoured by the Barucho ethos. Among other groups and in other districts, such behaviour would be considered 'niggardly', and especially so among the Shina, who are reputed for 'prodigality'.

8 Karwalo or Karwalo falls in the middle of December. In some districts it is celebrated as a special occasion; in others it is the season for slaughter of livestock. Kent cannot be kept during the summer, and animals are seldom slaughtered then unless a large number of people are to be present to consume the meat immediately. Karwalo meat may be dried, smoked or preserved in snow, and it is consumed through the winter. See also Biddulph, 1996, p.100.

The events of the individuals' life cycle are more significant, being less frequent, involving the accumulation of consumable over a longer period, and being characterized by a greater element of competitive behaviour in the disbursement of these. In the principalities they make for but a small part of the social deference accorded to an individual, provided that certain minimum appropriate obligations are fulfilled. In the asephalous communities however, and among the Kalash, Bashgali and the non-Indi groups of Southern Chitral, the members of a homogeneous social group — such as a caste or a clan — gain explicit social advantages in return for lavish expenditure at rites of passage which are much greater and which are more directly related to the amount consumed and the number of people present. Nor are social considerations alone involved: for the individual who is involved in a feud, lavish feasting is a method by which political support may be obtained and confirmed.

In all districts the birth of male children is celebrated, but seldom elaborately, and there is now some tendency for birth and circumcision to be celebrated at the same time. Two circumcisions were recorded, both in the principalities, the costs of which were Rs.130 and Rs.250. Informants stated that for nearly all circumcision celebrations the costs fall between Rs.100 and Rs.400.

Marriages are of greater significance. The usual procedure in the principalities among the cultivating classes is for the parents of the man to pay cash or goods to the parents of the woman, who then use this to have silver jewellery made or to purchase clothes or utensils for the couple. It is unusual for the woman's parents to retain any part of such gifts, although they may have the right to do so, and may use some part of it for the expenses of the marriage. Where the prospective husband owns little land, the woman may be given a field or two, although daughters have not generally inherited a share of land. The costs of a marriage are thus shared to varying

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10 Circumcision is not practised by the Kalash, but there is a celebration when a boy first walks and adopts trousers. One such celebration was recorded, the costs of which were Rs.400.
degrees, between the two households.\textsuperscript{11} In the acahual communities it is more common for part of the payment made by the man's parents to be retained by those of the woman; it therefore partially represents a 'bride-price'. This latter is usually paid in the form of goods, and may be as high as Rs.10,000. Bride-prices were also reported among the Bashafs.\textsuperscript{12}

Of 43 farmers in the principalities (Dho, Sakhri, Yeshun and Shin), 11 had incurred the expense of one or more marriages or funerals during the previous twelve months. Of 10 marriages, the average cost — for both sons and daughters, and including all payments and expenses — was Rs.1,030.\textsuperscript{13} In Chilat village, in Chilas, 10 farmers reported marriages or funerals in the previous twelve months. The costs of three marriages, including payments to the bride's parents, averaged Rs.1,470. Of five funerals in the principalities, the average cost was Rs.115, but in Chilat the costs of three funerals — at Rs.1,000, Rs.1,200 and Rs.1,300 — were considerably higher than any recorded in principalities, whether itemised in detail as for the five instances, or described qualitatively.

It is death obsequies and feasts that are specially important in the acahual communities and may be the occasion of considerable expenditure by landlords and cultivators. From Gor it was reported that the slaughter of 5 or 6 bullocks for a funeral feast is common.

\textsuperscript{11} Marriages have been described in the literature. Procedures vary slightly from one locality to another, and with economic and other circumstances. See, e.g., Biddulph, 1880, pp.7ff; Chulam Muhammad, 1907, p.98ff; Schomberg, 1935, p.196ff; Schomberg, 1938, pp.72,231. In the principalities there is a tendency towards later marriage, since it is now preferred that a man should complete any education or training and should be established with his own share of land, rather than his wife being received into his parental home; this may be an additional cause of the decline in the size of households in the principalities. In the acahual communities, betrothals and marriages continue to be arranged at earlier ages for the purposes of political alliance.

\textsuperscript{12} Sharur, 1945, p.25; see also Robertson, 1895, p.535.

\textsuperscript{13} This may be compared with data for villages in Lahore District, where in 1936-7 the average expenditure for sons' marriages was Rs.1,306 and for daughters' marriages was Rs.800. W.L.Slocum, Jamiil Akhtar, Abrar Fatima Sahi, *Village Life in Lahore District: A Study of Selected Sociological Aspects*, Lahore, 1955, p.34.
among Skin and Yekkhun farmers, while from Langir an instance was recorded there was a mound of wheat and 12 bullocks had been consumed which, at conservative estimates of current prices, represents an expenditure exceeding Rs. 5,000. Barth writes of Indus Kohistan:

Death is the occasion for the most extreme ostentation—buffalo, sheep, goats and gallons of clarified butter are consumed by a large number of visitors ... They ... eat a sumptuous meal ... 14

Lavish provision for feasts remains an integral part of social and political organisation in the acrophalous communities, but in the past—in the 19th and earlier centuries—the procedures may have been more formalised. 15 This is suggested both by what is known of traditional acrophalous and Bashkali organisation and by what has recently been observed among the Kalash. Of a time when armed conflict was presumably a less frequent outcome of feuds, it has been reported of the Shinshari communities that disputes were resolved by

... 'kanai', a system by which the rivals try to beggar each other by entertaining the community to dinner on alternate days. The side which spends most succeeds in enlisting the majority of his compatriots to his interests and is thought to have proved his case.16

Such a clearly formulated procedure may be compared with the traditional election of representatives in Nuristan, which involved an even more explicit connection between feasting and rank. Of one of the Nuristan communities, Robertson reported that

A man can only become a 'just' or headman by going through a prescribed ceremony ... he has to banquet the whole of his tribe on eleven different occasions, and entertain his brother 'justs' with ten separate feasts. (He thus) ... becomes an exalted personage ...

... although once a 'just' always a 'just', yet a very wealthy man is practically compelled by public opinion to keep on going through the ceremony again and again ... Unless he does this he is certain to fall in maintaining his influence and popularity ... 17

14 Barth, 1956a, p.48.
15 See also Jettmar, 1960a, p.123.
16 Frontier and Overseas Expeditions, 1907, 1, pp.36-7.
Also Gulam Muhammad, 1907, p.101.
17 Robertson, 1894, p.203. Riddolph, 1890, p.130, remarked that 'just' ... is apparently the same title as the Juehtero of the Shinkari republics.
Similar procedures continue to be followed among the Kalash, among whom the slaughter of a large number of goats and the feasting of the community is the means of achieving formal rank. Snoy has mentioned this, and has added that

Wealth is the prerequisite for such feasts, but often a man spends his entire fortune in order to gain social standing. Wealth, as such, is not honored; only a man who distributes his wealth gains social prestige and may be elected into the council of the elders.18

Kalash death ceremonies are also invariably an occasion for lavish expenditure. Schonberg records that at the death of one important individual, a hundred head of cattle were distributed in his honour.19

If a Kalash man dies who has acquired merit in this way (i.e., become a numaq) or who has distinguished himself as a brave warrior or hunter, his funeral ceremony—which, even for an ordinary man, means feeding the entire clan—becomes a still more costly affair.

... for three days ... everyone who comes to the house of mourning is fed. One year later, provided the deceased has claimed to merit, a wooden statue ... is erected in the cemetery ... a substantial feast is also involved, so that the erection of such a statue is a very expensive undertaking.20

The practice of erecting funeral effigies (see photograph 11 opposite) is becoming less common, but it was formerly widespread among Kalash and Bashgali, among the latter of whom there was similar feasting of the community for several days when an effigy was created.21

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18 Snoy, 1959, p.526. Data concerning the present procedures for attaining the Kalash rank of numaq are contradictory. It appears that traditionally the procedure could only be followed by individuals possessing at least 1,000 goats. This qualification has now been relaxed, nor is there now a fixed quantity for the feasting itself. Figures between 60 and 280 goats have been reported for recent numaq ceremonies, together with the provision of varying amounts of other foodstuffs and even clothing. Two recent instances were recorded in which the total expenditure had exceeded Rs.12,000. In 1964 there were 7 numaq in Bumburet and others in Bumboret. See also The Cambridge Gilgit Expedition 1960, Report, n.d., pp.10-1.

19 Schonberg, 1938, p.52.


21 Shalamar, 1946, p.28.
Perhaps derived from a similar tradition is the creation of rectangular grave markers, which is widely practised in the Shinaki and Mohistan communities. See photograph 10 opp. p. 80. Some of these are elaborately carved and constructed, and add considerably to the cost of death ceremonies. Jettmar has observed that they are one of the very few outward and visible expressions of wealth in Shinaki.

The foodstuffs disbursed at funerals and on other occasions for competitive ostentation are derived from the agricultural production of the community and consist especially of grain—maize and wheat—ke—jats and clarified butter. Those with more agricultural assets and higher incomes in the form of agricultural produce can accumulate the necessary stocks from the surplus over day-to-day consumption, but if social compulsions are strong it may be necessary for those with few assets or small reserves to borrow if they are to maintain their status. This may make for indebtedness.

Firth has remarked how, in peasant societies, social organization impinges upon saving and investment behaviour, and he has discussed the various phenomena and items that may be classed as investment and capital goods. Conspicuous expenditure and feasting are normally classed as consumption "... irrespective of any reciprocities and complications in status increment which would seem to be involved."

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22 See also Neve, 1913, p.113; Barth, 1956a, p.40; Jettmar, 1960b, passim and especially plates I - VI.
23 Jettmar, 1960a, p.127.
24 Clarified butter may be stored underground for up to 50 years in Shinaki localities. The older it becomes the more it is prized as a delicacy, and the greater the prestige attached to its provision at funerals etc. Hence the facetious comment often heard in the Gilgit Agency, "When a Shin is up (alive) his butter is down (buried); when a Shin goes down, his butter comes up." See also Siddulph, 1890, p.34, who states that "... wealth is computed by the amount of butter stored up"; and Ahmad Ali Khan, 1934, p.2.
but, as he points out, the opportunities for alternative productive investment in a peasant economy may be very restricted. In some circumstances there may be transactions which do not lead to increases in physical productivity, but which nevertheless may be 'significant forms of net investment'. By his criteria of convertibility and 'capacity to assist future consumption' the rank-attainment procedures of the accephalous communities cannot be considered as investment, but certain features in the principalities, which are discussed in the following section, may perhaps be so thought of. If all feasting is regarded as part of current consumption, then it appears that, at equivalent income levels, rates of individual voluntary saving among farmers and landlords in the accephalous communities have been lower than in the principalities, while consumption rates have been correspondingly higher and have absorbed most or all of current production.

That within the total income range of the accephalous communities there are differences in consumption behaviour has been seen; this is also so in the principalities, but in neither case is there enough evidence to demonstrate quantitatively a rising marginal propensity to save with increasing income. Nonetheless, since at the lowest income levels there is almost no saving of any kind, it can be presumed that there is some tendency at higher income levels for individuals to save at a higher rate. The tendency may not be strong even in the principalities, where those with higher incomes 'eat better', in particular eat more meat and a larger proportion of the preferred grains, and are also better clothed, using materials of higher quality and renewing them more frequently.

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27 i.e., when millet, rather than millet and barley. Informants' estimates of present-day individual annual consumption fall between 4 and 6 mounds. (With fruit and animal products forming a large part of regional diets, this compares favourably with minimum subsistence requirements in 'grain equivalents' - i.e., with additional foodstuffs converted to grains and added - of about 7 mounds, suggested by Clark and Haswell, 1964, p.49ff.) Other things being equal, those who cultivate eat more grain than those who do no physical labour. There is no evidence of significant differences in the average daily food intakes of cultivators in different parts of the region.

Two additional features associated with the principalities may have operated against higher rates of saving at higher income levels. One has been that under a centralised government, some proportion of income is usually taken in taxation. That data there are suggest that cultivators and landlords have generally paid an equivalent of 5 - 10% of their incomes in tax, whereas labourers have often paid nothing, or given service only.\textsuperscript{29} Secondly, there is the convention by which those who hold offices of state, together with locally-resident aristocracy, are expected to provide for the poor of the locality, to entertain local cultivators at festivals and ceremonies, and to provide for visitors and travellers to the locality.\textsuperscript{30} Even the individual farmer who is considered to have prospered finds his economic obligations increased - for example, in assisting with the cultivation of those with insufficient labour or animal resources, or in making interest-free loans, or in contributing a larger share to the upkeep of the mosque. Obligations of this kind and their discharge have not made for prestige - although to fail in them may be socially damaging - ; they are regarded as an inevitable levy upon relative prosperity.

\textbf{Non-Productive Assets in the Principalities}

One of the criteria that Pirth suggests for those 'investments' whose return is non-material is convertibility. Where an individual acquires objects that not only give him social advantages but also enable him in the future "... to command a fresh set of services previously not under his control"\textsuperscript{31} then he can be considered to have made an investment. The traditional practice among the wealthy upper

\textsuperscript{29} In addition to taxes by state governments, 'tribute' is collected among the Ismaili population of the region for their spiritual leader, H.I.M. the Aga Khan. The amount levied depends upon individuals' holdings and incomes, but is probably small in relation to government taxes. The total for the region was about Rs.30,000 in 1906; Neve, 1913, p.152. (\textasciitilde Rs.150,000 at current prices.) More important than offerings are the Ismaili schools and services that are now being provided for by the Aga Khan.

\textsuperscript{30} For examples, see Schoenberg, 1935, pp.54-5.

classes of the principalities of accumulating certain kinds of goods might therefore be included as investment, and the goods themselves might be classed as capital assets. These goods had the general characteristics of being durable (or self-reproducing), value-retaining, of conferring social advantages, and of being both convertible and transportable. The category consisted of items, mostly imported, such as carpets and rugs, brocade robes, silks, precious stones, gold and silver coin, Russian and Chinese porcelain and china, firearms and other weapons, horse-trappings, and horses and ponies. Goods of this nature were carried by the caravans of the ancient and celebrated trade of Central Asia.

It was only in the behaviour of those whose incomes were higher—the farmers and landlords of the aristocracy—that there was the possibility of a degree of independence from considerations of the productivity of assets in terms of food, where additional considerations have been taken into account (and where they continue to be present) several of them appear to be similar to those conceptualized by economists for application elsewhere, in particular, expectations about security and risk, and liquidity.

One variable that has been relevant at all levels of income has been opportunity for agricultural investment. In some localities the supply of cultivable land and of pasture has been exhausted or has been restricted; in others, landowners have been able to add to their holdings and livestock until scarcity of labour or other factors have intervened.

Another consideration has been liquidity. For members of the upper classes whose productive assets were sufficient to ensure them an income in agricultural produce commensurate with their social position and hospitable obligations, political and military insecurity, with the possibility of dismissal from office or exile from the state, favoured investment in liquid and transportable assets. The items that have been mentioned were convertible throughout Central Asia, and instances were recollected by informants of princes and landlords escaping with considerable fortunes. 32 This consideration was irrelevant in the accephalous

32 Knight, 1099, p.432 gives an example.
communities where, although individual life may have been less secure, property was not liable to appropriation and banishment was reserved for criminal offenders.

For the aristocracy, given the possession of ancestral land and other agricultural assets, the accumulation, use and display of these costly luxury goods was a demonstration of wealth, social status and, since many of the goods were derived from the court, of a favourable relationship with the ruler. Similar ideas were associated with the employment of servants and the possession and use of horses, hawks and sometimes of hunting dogs. The display of regalia was often closely linked to procedures at court, both on formal occasions and at informal events, such as polo and hunting. (See photographs 12, 13 opposite.) Such conceptions of wealth and its uses persist in many localities in the principalities and were frequently expressed during the period of fieldwork. Some of the goods were purchased by individuals from foreign merchants in exchange for surplus agricultural produce; others, especially robes and horses, were received from the ruler as rewards and marks of favour. The circulation and display of these items was thus associated with the administrative procedures of the principalities.

Ideas about what constitutes wealth have been different in the acephalous communities, where wealth is largely expressed in numbers of livestock, especially goats and cattle. A few individuals are reported

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33 For one such occasion, see Durand, 1900, p.72, who describes the Katore Mehtar "... dressed in green silk ... riding a big horse covered with brilliant silver trappings ... (attended) by hundreds of horsemen and footmen in the brightest array. Cloth of gold, the rich silks of Central Asia, the most superb velvet coats, the colour almost hidden by the gold embroidery, the brightest English and Chinese silks in all colours, scarlets and blues, crimsons and purples, plain and brocaded ..." Robes and brocades often represented considerable wealth; those of the sons of the Mir of Nagar of the 1920s were priced at up to Rs.2,000 (c. Rs.6,000 at current prices).

34 At the Katore court there was a multitude of fine distinctions and subtleties connected with horses and riding. See, for examples, Durand, 1900, p.54; C.M. Enriquez, The Kathian Borderland, etc.; Calcutta, 1910, p.23; (for full title see bibliography); Schoenberg, 1935, p.131. Riding was forbidden altogether to the lower classes.
to have hoards of the particular silver coins that are suitable for conversion into jewellery, and many own rifles, but otherwise the luxury goods of the north are unknown. Horses were absent, and sports had no place in social life. Terraz observed that when horses were freely available to the Chilami raiders in Astor they were not taken.\(^{35}\) Personal ostentation in any form was (and continues to be) regarded as a provocation;\(^{36}\) even women were seldom adorned.\(^{37}\) Jettmar has commented upon the similarity of dress and appearance of wealthy landlord and landless labourer.\(^{38}\) Similarly among the Broghali and Kalash there has been little personal ostentation\(^{39}\), although turbans and robes of silk were sometimes used in rank-attainment ceremonies. For these groups also, wealth was expressed in terms of goats and cattle.\(^{40}\) This conception of wealth was appropriate to political and social organization among the ancephalous communities, and to certain cultural phenomena. It was favoured also by the relative opportunities for investment in alternative agricultural assets, and by the richer vegetation of the south of the region vis-a-vis the north.

Given both the limited possibilities for productive investment and traditional ideas about the uses of wealth, it is not likely that credit had a large role in the traditional economic organization of the principalities. The earliest references to borrowing refer to the low incidence of long-term indebtedness\(^{41}\), and this continued to be characteristic during the first half of the 20th century.\(^{42}\) In the ancephalous communities there was borrowing between farmers when individuals, acting under social compulsions, gave feasts more lavish

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37 Ahmad Ali Khan, 1884, p.3.
38 Jettmar, 1960a, p.127.
39 See also Robertson, 1894, p.203.
42 Census 1941, XXII, Part III, p.529.
than they could provide from their current hoardings, but how far this led to long-term indebtedness is not known. A tendency persists for farmers of the acrophalous communities and of the Bengali and Baluch to prefer to borrow for short-term needs, rather than to dispose of any assets, even when these are numerous. It is probable that loans were sought when several ceremonies required celebration in a short space of time, and that over a long period the production and consumption of farmers have generally balanced. Nowhere in the region does credit appear to have been a source of finance for investment and enterprise in the past, nor is credit for such purposes much evident in the current post-Partition phase of trading enterprise.
CHAPTER II. AVAILABE RESOURCES AND CULTIVATION

I. Irrigated Land and Cultivation
II. Extending the Cultivated Area
III. The Intensity of Cultivation
IV. Long-term Improvements to Land-Holdings
V. The Intensity of Annual and Seasonal Cultivation
VI. The Upper Altitude Limit of Double-Cropping
VII. Divisions of Labour

Irrigated Land and Cultivation

It has been for its economic properties that cultivable land has been highly valued in Badistan, and on these its political and social attributes have been based. In addition to being the major agricultural resource, cultivable land has additional economic properties as an accumulation of capital, represented by the labour, skills and materials invested by previous generations in channel-construction, field-preparation, the planting of trees and the improvement of the productive qualities of the soil by sowing and tillage. In both respects there have been differences in attitudes and economic behaviour between communities and groups. Nonetheless, the character of ambi cultivation is similar throughout Badistan - this is one of the features which gives unity to the region. Variation between communities is in degree rather than in kind, but it is significant, and, in terms of current government intervention, has become reflected in varying degrees of self-sufficiency in grain production.

That the quality of cultivation varied from one valley to another was recognized by the 19th century writers, some of whom described it in terms of the extent to which irrigation channels had been built under unfavourable conditions, and some in terms of the relative allocation of labour between cultivation, animal-husbandry and other activities. Comyn and others recognized that some of the variation was associated with the differing sizes of local populations in relation to the area of irrigable land and the other

1 E.g. Comyn, 1904, pp.250-4; Stein, 1903, p.38.
2 E.g. Frontier and Overseas Expeditions, 1907, I, pp.30, 37.
resources available to them.\textsuperscript{3} It was also recognised that political and military circumstances were more favourable in some districts than in others, and that in some districts insecurity during the 19th century had had particularly deleterious results. It has further been suggested that 'custom', 'enterprise' and 'interest' have a part in determining the nature of the agriculture of some communities.\textsuperscript{4} It is apparent, both from data collected in the region and also from the information of more recent writers, that not only these factors have been important, but that others too have had both direct and indirect results. The total number of variables that may influence the organization and conduct of agriculture and the allocation of resources is very great. Many continue to be explicit; others have lost their raison d'être with growing contact with the outside world.

In general, despite increases in the sizes of all populations, there has been very little change in agriculture during the present century, either in its organization, its efficiency or its diversity. Description of the present day remains very largely applicable to the 19th century and to the early decades of the 20th century.

Although some variables and their effects are explicit and measurable, the basic data for any quantitative treatment are absent. No part of the region was included in the recent Pakistan agricultural census.\textsuperscript{5} Population figures for the 19th century are lacking, and many of those for the 20th century are unreliable. Price data cannot be used as a guide to relative productivity of land in different districts because the land-market has been, and nearly everywhere continues to be, almost completely imperfect.\textsuperscript{6} Crop yields provide some indication of the quality of cultivation, but their usefulness is limited by variation in environmental factors. These may be of the kind to affect yields directly - as, for instance, the quality of soil

\textsuperscript{3} Conway, 1834, p.250-1; Stein, 1905, p.38; Thakur Singh, 1917, p.65.
\textsuperscript{4} Drew, 1875, p.428; Biddulph, 1880, p.73; Thakur Singh, 1917, p.67; Iqbal-ud-Din, 1965, p.142.
\textsuperscript{6} Figures for the 'price' of land were collected in a number of villages, but to very few can any meaning in terms of productivity be attached.
and the supply of irrigation water, which appears to be evenly distributed
- or they may have their effect through the distribution and productivit.
ity of alternative supplementary resources, for instance the natural
occurrence of vegetation allows the maintenance of larger numbers of live-
stock in some districts, which in turn may provide more manure per cultivated
area, and so make for higher yields.

Data for crop yields are not sufficiently reliable or comprehensive to
indicate quantitatively differences between districts and communities, but
the figures that were collected suggest a pattern of variation that is
supported by qualitative data. Yields are higher than average in Nagar,
Gilgit, Astore and in parts of Chitral namely Kohala, the Kho localities of
lower Chitral, and the Kalash localities. Yields are reported to be inter-
mediate in Kandia, Punza, Tribes and Yasin, and are reported to be generally
lower than average in northern Chitral, Ishkoman, Huniki (with the possible
exception of Darel), Swat Pakistan, and the non-Kho localities of southern-
most Chitral.

Livestock is the second major ubiquitous agricultural asset of Badistan.
For some groups, the ownership of livestock has been more significant than
land in their ideas about wealth, social status and personal prestige, but
only a small number of nomadicubar have been reported as entirely dependent
economically on the maintenance of livestock. Very few of these, if any,
are permanent regional inhabitants, with the exception agriculture in
Badistan is based on the complementary productive relationship between
irrigated land and livestock.

The arable output of a cultivating unit - household, village or
community - can be increased by extending the cultivated area or by
allocating to the existing cultivated area a greater quantity of comple-
mentary factors of production. These are both forms - one longer term,
the other shorter - of investment in arable land. Where they can be
identified, they can often be shown to be influenced according to the
expectations of actors which cultivators report that they take into
account.
Extending the Cultivated Area

The means by which the cultivated area can be extended in the construction or improvement of an irrigation channel, so bringing water to an area of land on which fields can be made 7. Channels and their construction have been described in the literature 8, and are illustrated in photographs 14 and 15 (opposite). They have taken several years to complete, have involved a considerable investment 9, and demanded high levels of skill and craftsmanship. Depending upon local physiographic features and the adequacy and consistency of water-supplies, and upon the local sanctions for extending irrigation, so the area watered from any one channel varies from a few fields to several hundred acres. The levels of technical achievement and the investments represented in channels constructed to irrigate equivalent areas therefore vary considerably from one village to another, but a more general variation of the same kind can be observed between districts.

Several writers have commented upon the magnitude of the technical difficulties in the face of which channels have been constructed in the Durusho localities of Hunza and upon the elaborate nature of extension techniques there 10. As irrigation is extended to increasingly unfavourable terrain, so the work of preparing new fields becomes increasingly laborious.

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7 In this discussion the term 'expansion' is used to indicate the progressive irrigation of land under conditions of increasing physiographic unsuitability, or increasing technical difficulty in relation to regional channel-building techniques, it is not meant as the reverse of 'intensive', which is used of the degree of application of complementary factors of production, particularly labour, to an already cultivated area.


9 Tahir Singh, 1917, p.27, reports that at the beginning of the century a channel at Hirtum Ders in Gilgit, from which 183 acres were irrigated, cost Rs.2,000 (or Rs.3,000 at current prices) but he does not state whether this figure included the cost of labour, although it is unlikely to have been so. Rural Islam, 1956, p.50, lists 15 channels that were being proposed for Chitral in 1956, the average estimated cost of which, including labour, was Rs.40,000, and from which the average area to be irrigated was 550 acres. Several of these estimates have been exceeded in the actual construction of the channels.

...a serious business tackling a rocky bit of mountain side. You roughly plan your field and then start hacking out a great triangular gash at the upper side. It is full of stones and boulders which have to be removed; the smaller ones are set aside for revetting walls; the larger ones are laboriously broken up with sledge-hammers (or blasted if you can get hold of a little gunpowder); the stony earth is carefully sifted into separate piles of varying degrees of fineness. Then the lower supporting wall is built to the level required, stones are thrown in for a foundation, next the coarser earth, and the surface is dressed with the finer...11.

A second method used in Hunza to extend the area of cultivation, and which was also reported from Chalt, is feasible only where the irrigation water carries suitable sediment.

They find a bare granite face with a slope not over 20 degrees, and at its feet they build a crescent-shaped retaining wall. They then turn in water until it forms a pond behind the wall, let the sand settle, drain off the clean water, and flood again. By repeating this for a year or two, a small terrace is formed.12

As a result of employing such techniques in Hunza ...

...not a yard of land is wasted. Narrow strips of land, a few feet wide and varying in length from a few feet to 20 or 30 yards, and seldom exceeding 50 yards, stand one above the other like steps up to the limits of possible cultivation.13

While in Hunza the extension of irrigation has approached the limit with existing techniques, the situation in other districts, particularly those of the cultivable communities, is different. Stein, who travelled through Chilas, Darel and Tangir in 1913 observed the abundance in many localities of flat land that could have been readily irrigated.14

According to informants, such irrigable land still remains barren in Darel and Tangir, and a similar situation was observed in the Nind and Kinner valleys of Chilas and in the Indus valley there, and in Qamri Kohistan. Of 14 Chilas villages, it was reported in 12 that there are areas of barren land near the village over which the farmers and landlords of the village have rights; in 8 of these there was reported to be a practicable potential supply of irrigation water.

11 Lorimer, 1939, p.211.
12 Clark, 1957, p.204.
14 Stein, 1928, I, p.11 ff.
The other communities of the region fall between Hunza and Gilgit in the degree to which the extension of irrigation has been taken. It is not possible to order them in a complete series, but from data collected and from observations it appears that Nagar follows Hunza, and then Gilgit, Panjal and the Kalaash localities. Barren but irrigable land is reckoned by informants to be relatively more plentiful in Kaski, Lashkara, Garel, Tenghar, Guillas and Gauri Kohistan. In recent years there has been a tendency for the inhabitants of some villages, whose supply of irrigable barren land adjacent to the existing area of cultivation is exhausted, to irrigate and begin cultivation within the valley at the mouth of which the village is situated, and where the villagers as a whole have rights. In this way the village area is extended, but the new part is separate and is usually uninhabited. Patten reports this in Hunza 15, and it was observed in Nagar, Gilgit and Panjal.

Traditionally, every village and community depended upon the economic resources of its own geographical area. In Hunza it has been the pressure of the population, made all the greater by limited pasture resources, that has been a major factor making for the greater extension there. It is not known how much of the 19th century this was the situation, but land there (and in Nagar, Gilgit and -later-) was already in short supply by the 1890's 16.

There are a number of additional variables that made for the extension of irrigation in Hunza and Nagar and to a lesser extent in the other principalities, but which did not favour the process in the aospalous communities. Of these, the criteria for rights to land were among the most important. The exclusiveness of landholding in the aospalous communities operated against the extension of irrigation by indigent groups or by individuals, and Patten has described how, in Swat, the wakh system also discouraged families from extending irrigation to the barren land adjacent to their holdings 17. Even where landless members of the community might have been able, with their own resources, to extend irrigation to suitable barren land, their landless condition in itself excluded them from representation on the dignities and thus from an effective

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15 Patten et al, 1956, p.30
16 Humphry, Oscar Moors, 1889, p.130; Nash, 1876, p.120;
   Louchart and Woodthorpe, 1909, p.85; Cobbett, 1869, pp.12, 132.
17 Patts, 1963, p.36.
part in the making of decisions about extension. In the principalities however not only did some governments encourage the extension of irrigation by making grants of barren land to immigrants but, at a more local level, inhabitants with little or no land were sometimes able to irrigate barren land on their own account and were, in any case, represented on village councils, and so had some part in the making of decisions about bringing barren land under cultivation.

Another consideration, which again depended upon the system of government, has been the varying administrative arrangements under which communal investment decisions have been put into effect. Under the centralized governments, with their hierarchy of officials and sources of revenue and labour, conditions were more favourable for the financing and administration of channel-building and the organization of labour forces. In contrast, the indiscipline of members of the aethealos communities, together with the absence or ineffectiveness of decision-making and administrative bodies, made the co-operation necessary for channel-building more difficult to achieve.

It has been suggested by many informants and some observers that members of certain groups possess some form of inherited superiority in the technical skills of channel-building; in particular, the Burusho are credited with skill in masonry and the Kalash in the construction of wooden aqueducts. The failure of the aethealos communities is attributed by informants to a lesser complement of technical skills. Geneticists reject any idea of ethnic groups as such possessing specific and inheritable abilities; it is possible however that, as a result of generations of semi-sedentary agriculture and difficult channel-building, the Burusho and Kalash have acquired a form of specialized knowledge which is passed on to each generation. There is evidence in addition to comparative visual observations between districts; the Burusho have succeeded in bringing water at Silqi and Orshamanda where local inhabitants had failed, and the Kalash are sometimes asked to visit neighbouring localities and supervise aqueduct-building.

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18 See also Convers, 1934, pp. 250-1. This is to reverse the sequence suggested by Kittfogel, but his hypothesis - that centralized government has evolved in arid regions as a consequence of the administrative and logistic requirements of large-scale irrigation projects - applies on an altogether larger scale than is found in Pakistan; Karl A. Kittfogel, Oriental Despotism: A Comparative Study of Total Power, Yale, 1958.

19 See also Stein, 1928, I, p. 10.

Expectations about the security of an investment – whether of labour in a season's crops or of materials and employees' services in long-term extensions of irrigation – are taken into account by cultivators and landlords who frequently, during the period of field-work, rationalized and expressed their expectations about the future and their investment decisions.

Most environmental uncertainties in the form of 'natural disasters', such as rock-falls, floods, and crop and animal diseases, appear to be taken as largely unpredictable, and within the duration of a generation are reckoned to be evenly spread over most of the region. In a few localities certain natural events are known or believed to be periodic and may have discouraged the extension of irrigation there. There are also beliefs in some districts in the particularly unfavourable consequences of resettling areas of land that have been abandoned after some natural disaster, but elsewhere village sites have been abandoned and reoccupied repeatedly.

Of more general concern have been expectations about the security of holdings and the risks of conflict. Individual's property and their investments were subject to many of the same hazards and uncertainties as their lives. The general impression of the consequences of such uncertainties is that, in so far as they were different in different districts, insecurity of tenure in a peaceful situation – as under the Katora – was especially unfavourable towards intensity of cultivation and the improvement of existing holdings, but was in general less detrimental towards the extension of irrigation. Where there were sporadic raids between settlements and communities, but without decisive result – as in Muristan, between Himma and Nagar, and along the Katora borders – then the consequences for agriculture

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21 Schoenberg, 1938, p.137, commented upon the failure of local inhabitants to resettle at Gram in the Zimer valley, where conditions were apparently most favourable at the time of his visit. Israr-ud-Din, 1965, pp.10-1, 104, explains that the site was abandoned in the second half of the 16th century at a time of local glacial advance, and that a strong tradition has grown up that to resettle there would be to invite further misfortune.

22 E.g. Bulche, onto whose irrigation channels the Minar-ehe glacier is known to have twice advanced and caused the abandoning of cultivation.

23 Frontier and Overseas Expeditions, 1907, I, p.38; Only along the Katora borders was there danger of external attack, and more particularly of cattle raids. There were forts etc. and farmers kept their livestock under guard; Israr-ud-Din, 1965, p.122, but intruders were usually quickly expelled and there was seldom damage to fields or crops. Within the last five years there have been cattle raids across Chitral's border from Dir Kohistan and Muristan.
from this appear to have been relatively slight. There were inter-ethnic warfare and territorial conquest, as in the Gilgit valley and Attock, or internal conflict, as in Shimalk and Kohistan, then the consequences for both extension and intensity of cultivation appear to have been most unfavourable. While in many districts there were profound changes at the end of the 19th century and have been further changes subsequently, the risks and uncertainties persisted in some circumstances into the present century and in some districts continue to influence the agriculture. It has been seen above (p.107) that uncertainty over land-rights and ownership in some places in Chitral is continuing to discourage investment, and Schonberg attributed the agricultural backwardness of Chitral to the land-holding system, and mentioned both non-intensive features and a lack of incentive to extend irrigation 24. This is confirmed by Lurç-ud-Din, who states that only since the reforms of 1953 has there been an increase in confidence and incentive 25. Even in Attock and Gilgit, where rights and ownership were confirmed at Settlement, any uncertainty has been detrimental 26.

In the acrophalous communities risk and uncertainty have stemmed specifically from the pursuit of individual needs. While these did not generally threaten property, they made for a lack of economic incentive which was added to by other features of acrophalous organisation. This is reflected in both the relatively small degree of extension and the low quality of cultivation.

The Intensity of Cultivation

Many of the variables that have influenced extension also make for differences in the intensity of cultivation—this is especially apparent where longer-term improvements are concerned. As regards tilings itself, there are some additional variables, but most are of a generally similar nature, concerning expectations about the near immediate future. Others are to do with cultural conventions, such as the division of labour between the sexes.

24 Schonberg, 1938, pp.104, 220.
26 Thakur Singh, 1917, p.38 has recorded an instance.
The quality of cultivation that can be recognized by so many of the earlier travellers is a fact upon which all informants were in general agreement. It was further stated by informants that all cultivators in the region know that, in general, a higher input of labour, manure, etc., produces higher yields, and that (with the possible exception of newly-settled Gujars) all cultivators know of various processes of cultivation by which increased inputs can have this effect.

Informants agreed that the intensity of cultivation is greatest in the Bursa tribes in the Bursa. Fields are farmed and levigated, boulders are broken and stones removed. Walls are built around fields and orchards, both to dispose of the stones and to exclude livestock. Each crop is diligently and systematically tended several times. Fallowing is not practised.

...Every ounce of manure is hoarded... The herdsmen carry down baskets of it on their back, one, two and three days' journey home from the mountain pastures.

...Every twig and leaf is swept up as it falls, for fire or fodder... (in autumn) every inch of countryside is swept again and yet again, for weeks, by small children... to gather the splinters of half-frozen grass that still remain and harvest the sheep and goat pellets. These baskets of she are spread as bedding in the byres and ultimately find their way as dressing to the fields.

Nevertheless, despite the most intensive cultivation, yields in Bursa are reported to be in the middle of the regional range. This is attributed by informants to the small size of flocks and herds and the consequent shortage of manure. Horticulture is also intensive in Bursa; the variety of vegetables is considerable, and fruit-trees are grown in large numbers and are carefully tended.

Cultivation is also intensive in Nagar, in the most of which, in Lutish, and in some localities in the south of Chitral, especially the Kho villages of... Chitral town and Drees, Had, Kesh, and the Kalash and Bishkali villages. This high intensity of cultivation, together

27 See also Siddalup, 1880, p.30; Schomberg, 1935, pp.112-3; Tilman, 1949, pp.49, 61; Paffenh et al., 1956, pp.50, 52.
28 See also Leonard, 1936; pp.242, 244; cf. Paffenh et al., 1956, p.32.
29 See also Lockhart and Goodthorpe, 1889, p.266; Durand, 1900, p.90; Vanilov and Buchar, 1929, p.540; Schomberg, 1938, pp.35-6; Snov, 1962, p.61.
with a generally more favourable climate situation, is reported to account for the high yields in these places. In other districts cultivation is altogether less intensive; fields remain untended or unlevelled and stones and boulders are left, weeding is not practised, manure is collected only from byres in the village, and land is left fallow. Fruit-trees and vegetables are very few in some districts, and maize, which requires little attention, is the only crop.

Intensity of cultivation is discussed first in respect of permanent improvements to land- holdings, and subsequently in respect of annual cultivation practices.

Long-term improvements to land-holdings

When a river terrace is brought under cultivation, the surface is usually already level, whereas fans slope to varying degrees, and valley sides are often relatively steep. (see photograph 1, 18, opposite p. 13.43) This makes for varying utility in terracing. In progressively steeper slopes the terraces become smaller and more numerous, until ploughing with bullocks becomes impracticable and the smallest fields have to be dug by hand. In the narrowest valleys, and where cultivation is extended to steep slopes above a terrace or fan, the gradient may exceed 45°, so that the retaining walls of terraces are higher than the fields are wide. This is reported in Kandia and Hunza.

Agricultural authorities favour the terracing of natural slopes and the levelling of fields for cultivation, the chief and ubiquitous advantage being that soil erosion is minimised. But several of the farmers of Chitral, where fields are seldom terraced, reported that they do not favour terracing because the total cultivated area is thereby reduced. This is supported by Khalid Ashraf's measurements in North Pakistan, which indicate that on "middle-slopes" land the net cultivated area is reduced by 30%, while on "steeply-sloped" land more than 50% of the cultivable area is lost by terracing. The Kho farmers argue that whereas natural slopes

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50 Barth, 1956a, p.19.
51 Clark, 1957, p.201; Morgan, 1933, p.71 gives an extreme example where 15' - 20' retaining walls support fields 3' wide.
are not too steep for ploughing, and where the water supply is adequate, the disadvantages of reducing the cultivable area, and the labour involved in the construction and maintenance of terraces outweigh the advantages of preventing erosion and conserving water. All farmers agreed that terracing and levelling are advantageous for cultivation on steep slopes, in which circumstances they are practised by all farmers whose cultivation was observed, with the exceptions of the Dakh at Someil and Sujor at Sahat and Gatche where soil erosion was conspicuous. It is not possible to determine whether the farmers' argument against terracing is a recent rationalization of a long-standing reluctance in Chitral to make permanent improvements to holdings, nor whether terracing and levelling is necessarily an intensive feature. In some villages at relatively low altitudes levelling has been undertaken in order that rice may be grown.

Terracing is associated with the removal of stones and boulders from fields. All informants agreed that this could lead to significant increases in output by improving the quality of soil, making cultivation processes, especially ploughing, easier, and by enlarging the cultivated area. In Runsa and Nargar, a newly-irrigated field is dug down to a depth of 2' or 3', and all small stones are removed. Boulders too large for hammering can now be broken by blasting; the traditional method was to light a wood fire over the boulder, raise it to a high temperature, and then pour water or some solution upon it, causing it to crack into pieces which could be hammer and removed. Where fuel was scarce, as in much of the north, this was a costly operation. A somewhat less intensive technique which is used in Lutkash and by the Kalash and Bashguli is to remove all smaller stones and to pile them in heaps upon larger boulders that are too heavy to move. Elsewhere in Chitral, and in parts of Gwari and Soltan and chilas, it was observed that there was little attention given to the removal of even small and easily handled stones.

Stone stones are removed from fields, they may be used to construct walls around fields and orchards. The utility of building walls to keep livestock away from crops depends upon the local system of herding. In much of the south of the region the pattern of transhumance makes such a precaution unnecessary, whereas in Runsa the livestock may remain in the

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33 See also Durand, 1900, p.90; Vavilov and Kudinch, 150, p.126.
villages for longer periods. There is nonetheless a greater measure of
attention given in Hunza to preventing animals from damaging fields, and
it is reported that chickens, which cannot be excluded by walls, are not
favoured for this reason. 34

The output of foodstuffs per acre of cultivated land can be considerably
raised by growing fruit-trees. A mature apricot tree yields up to 30 pounds
of fruit per year, and a large mature walnut yields 5 - 6 pounds. In
addition the leaves provide valuable animal fodder, and the wood is used for
fuel and carpentry. Since all fruit-trees take several years to grow to an age
and size when they begin to bear fruit, and may then bear fruit for several
generations, the planting of trees may be considered as a long-term
improvement and an intensive feature. The distribution of fruit-trees and
the varying degrees of attention given to horticulture fit the pattern of
variation in intensity of cultivation. For the Kalash and Bashigal, and
in the north of the region, especially in Hunza, Nagar, Gilgit and Punial,
fruit is an important element in the diet. Information was collected
about the fruit-trees owned by 29 farmers of these four districts, who
reported an average of 27 mature trees, of which an average of one in four
was an apricot. It is likely that in these districts apricots have
partially replaced the longer-established walnut and mulberry, being higher
yielding per tree and occupying a smaller area. The apricot kernel is a
valuable dietary item, and its wood is esteemed.

In Hunza in particular the apricot is a great staple, and
not a day passes throughout the year that apricots are not
eaten either dry or fresh.

... this tree ... is as important as wheat and other cereals
in the diet of the people. 35

Every farmer plants and replaces trees so invariably that in Hunza
cultivated land and fruit-trees are to be regarded as indivisible assets.

The emphasis upon fruit-growing in the Hunza and Gilgit valleys is
illustrated both by the greater number of trees per cultivated acre and
per famer, and also by the greater variety in the kinds of fruit grown.

34 See also Schomberg, 1935, p.133. Cf. Lockhart and Lockthorpe,
1889, p.184.

The Burusho are said to distinguish 29 varieties of apricot which grow in the Hunza valley, and there is a wide range of other fruits there and in the Gilgit valley, some of which are probably 19th or 20th century introductions. Other fruits observed or reported are grape, apple, peach, cherry, fig, pear, pomegranate, almond, persimmon, quince and bear. Besides growing more trees, the inhabitants of the north-eastern principalities, especially the Burusho and the Yeskuns, give more attention to tending their trees - to grafting, pruning etc., and to soliciting the crop, especially by drying apricots, mulberries and apples for winter consumption. Different varieties of apricot are grown for specific purposes according to their special properties e.g., early ripening, suitability for drying, an oil-rich kernel, late ripening. Apricot nits are invariably cracked, both for the kernel which may be eaten or ground for oil and flour, and for the shell which is burned. Apricots and occasionally apples are dried in Shitral, but fruit is seldom dried in Shinaki or Kohistan.

The old-established fruits - walnut, mulberry and grape - are found in all parts of the region, but in the south fruits are of economic importance only to the Bashgali and Kalash, and to a lesser extent, to the Cauiri. For the Kalash the walnut is a staple food. In Chilas the variety of fruits recorded was very small, and in Niat village 7 out of a random sample of 11 farmers reported that they had no trees of any kind. (See photograph 17 opposite p.146) Although some fruits have upper or lower altitude limits which prevent their cultivation in some localities, the overall variation in horticulture is not associated with environmental limitations; it appears rather to be a further illustration of the diversity within the overall unity of Pardistan's agriculture.

36 See also Schomburg, 1935, p.187; K.Lorimer, 1936b, p.241 (photograph); Clark, 1956, p.252.
37 Among Ismailis and Kalash, whose ethos permits it, grapes and mulberries are also utilized in making wine and distilling spirit.
38 See also Paffen et al., 1956, p.34.
39 See also Ancoy, 1956, p.66.
40 See also Schomburg, 1938, p.70. See photograph 16 opp. p.146.
41 Cf.: Stein, 1928, I, p.10.
Information collected in Chitral confirms the statements of Schomberg and Israr-ud-Din that uncertainty over ownership and tenure of land was a disincentive to long-term improvements; where there were risks of land being seized these were greater for the more productive and higher quality holdings. For mehrbanj, land incentives to plant trees and to make permanent improvements were entirely lacking.

It was in respect of long-term investment that the weesh system was so particularly detrimental. Stein, who observed the system in 1920, observed that it "prevents the undertaking of any permanent improvements" and he, Barth and Fautz all mention the scarcity of fruit-trees in areas of Swat where weesh was practised, and their planting once permanent possession of particular plots was assured to farmers. Fautz draws attention to the relative abundance of fruit-trees - in number, though not formerly in number of varieties - in Swat Kohistan, where there is no tradition of weesh. The treeless appearance of villages in Chilas supports the suggestion of a reluctance to plant trees. (See photograph 17 opposite; c.f. photographs 16, 18 opposite.)

An apparent anomaly that was observed in some Chilas villages, and was also reported from Kandia, is the high quality of the terracing there (See photograph 17 opposite). This does not fit a conception of weesh as being unfavourable to permanent improvements, nor does it fit a conception of bloodfeuds being unfavourable to cultivation. The explanation is suggested by the tradition from Indus Kohistan that most of the terracing was completed before the advent of the Pathan missionaries, and therefore before weesh was introduced, and before modern firearms were being used in feuds.

The Intensity of Annual and Seasonal Cultivation.

A wide range can be seen in the varying amounts of labour and other resources that are applied annually or with the cultivation of each crop. Only very occasionally was it reported that a shortage of man-power is limiting the labour-inputs for any particular holding in such a way that cultivation is being undertaken only on some part of the holding.

43 Stein, 1929, p.109, also pp.52, 101-2.
44 Barth, 1959, p.66; Fautz, 1963, p.95.
46 Barth, 1956a, p.19.
i.e., that land and other resources cannot be utilized for most of rope labour. Of 72 cultivators of various districts and groups who were questioned, only 1 reported that he and his household members are already cultivating as much land as they can. Nonetheless, in the few villages visited where the average size of holdings is exceptionally large and where tenants and labourers are not present - the next extreme example of which is Lashk, where holdings average 7 acres - it may be doubted whether farmers do have sufficient man-power, although in this instance it was reported that shortage of manure is the reason for up to 50% of the irrigated area being left fallow each year. Such large holdings in a district where there are not additional sources of agricultural labour are uncommon; Lashk is at the uppermost altitude limit of the Kha settlement, and appears to be undergoing a process of colonisation from below.

Published data about the size of household is available only for the Gilgit Agency up to 1941. By extrapolation the current average size of household in the Gilgit valley - Cupis, Panial and Gilgit - is probably a little over 6 members. 47 Of farmers in these districts reported their household membership, the average of which is 3 individuals, (exclusive of servants in three instances). Of these, an average of 1.7 are adult men fully-employed in cultivation. 48 If allowance is made for the larger average size of these households, then the average number of agricultural workers in these districts is probably 1 - 1.3 per household; this is what would be expected from the family structure of the region. From every district of the region it was reported that one adult man can cultivate 2.5 - 3 acres without any assistance, irrespective of the number of crops grown or the degree of fragmentation. 49 To be added to this capability

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47 Census 1921, XX, Part 11, p.220; Census 1941, XII, Part I and 11, p.357.

48 The harding arrangements of these districts make it possible for the labour requirements of livestock-husbandry to be ignored.

49 Fragmentation of holdings within the relatively small village areas is not a significant cause of inefficient use of labour, although as seen above (p.104) it may be wasteful of irrigation water. Two crops in one year extend the period of cultivating to about 9 months, where the village is near the upper altitude limit of double-cropping there may be only a short time available for harvesting the first crop and ploughing and sowing for the second; this may arise for difficulty, and additional labour is sometimes sought by some farmers for this period. In the Punjab, on double-cropped land, one man manages 5.6 acres: Clark and Heswell, 1964, p.120.
is the assistance given by women and children, the occasional employment of labourers, servants etc., and the frequent exchange of labour between households for certain operations, e.g., threshing and ploughing. It seems unlikely therefore - given the relationships between local agricultural populations and the cultivated areas that support them - that the availability of labour limits the undertaking of cultivation in more than a very few instances. This is not to suggest however that the average annual labour input per cultivator or per cultivating-household is the same for all districts; differences in this are conspicuous and form the subject of the present discussion.

All cultivators emphasized their understanding of the importance of manure, and in other localities besides humus manure is collected from the pastures and carried down to the village - e.g., in parts of Gilgit and in Jamshoro. In some villages in both north and south, arrangements have been reported whereby individuals with any livestock - especially those with large flocks of goats and sheep, and who are often Gujar, Balci or Kalash - keep them through the winter season in the stall of a cultivator with few livestock. The 'host' provides the housing and some of the fodder, and keeps only the manure in return.

Careful husbanding of manure is not necessarily an indication of a higher manure input, and may indicate a manure deficiency. Nevertheless the conservation methods of humus described by Lorimer 50 suggest a higher labour input, as does the degree of attention given there to the provision of appropriate stall-litters and the collection of additional fertilizers. The presence of certain wild plants and other substances in litters adds to the efficacy of the winter's dung and also makes use of the fertilizing properties of urine. 51 Other fertilizers which may be applied to fields,

50 E. Lorimer, 1936s, p.240; E. Lorimer, 1939, p.144.
51 Cf. Clark, 1957, p.204, who has evidently confused the foliage of trees such as poplar and apricot, (which is used for fodder) with that of certain other trees which is used for litters and as a green manure, (especially that of a leguminous shrub, ? Laburnum, which is found in the Chitral, Gilgit and Hunza valleys).
not only in Hunza, but also in Nagar, parts of Gilgit and in a few localities in Chitral, include leaf-mould, nitrogenuous wild plants, minerals, algae and silt dredged from irrigation channels, bones, ash, and night-soil. The natural occurrence of some of these may be a determining factor, but attention in general to such fertilizers is an intensive feature.

Associated with the manure supply may be the following practices. In several localities it was reported that a manure deficiency prevents the annual use of all fields, especially where holdings are relatively large, as in some villages in the north of Chitral, in Lashar and in Iakhawan. In such circumstances following may be a non-intensive feature, since shortage of manure does not necessarily preclude cultivation, although the yields of some crops may be low if insufficiently manured. Following may however be unavoidably associated with local water scarcity, or with unusually poor quality soil as at Dairigur, or even, exceptionally, with shortage of labour: it is therefore not an irremovable indication of a low intensity of cultivation.

In some districts fodder and manure deficiencies have been alleviated by the cultivation of fodder crops, e.g., clover and lucerne, which in addition serve as nitrogenuous green manures and also by their very growth improve the quality of the soil. These crops are especially characteristic of Nagar, Punial and parts of Gilgit. Their presence is taken by informants to indicate a high quality of cultivation. Fodder crops are altogether less common among the achenals communities.

It is not certain that the rotation of crops is an indication of more intensive cultivation. In some districts there is a regular rotation and in the rice-growing localities of Gilgit and Chitral there is an especially elaborate system. In these localities rice follows clover in some fields while maize follows wheat in others until, after two or three years, the growth of wild grasses in the paddy fields makes it necessary for the two rotations to be exchanged. In other districts there may be only one grain crop raised, so that the scope for rotation is almost nil; as for example in Baroghil, where the Wakhis raise only barley and some peas, and in much of the south, where the only crop is maize. Jettmar suggests that the growing of maize as a single crop may in itself be a non-intensive feature. 54

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52 See also Thakur Singh, 1917, pp. 65-6.
53 Schonberg, 1935, p. 60. In Central Kohistan manure deficiencies are said to prevent the extension of irrigation. Barth, 1936a, p. 55.
54 Jettmar, 1960a, pp. 129, 132. - 149 -
This is characteristic of Chilas, Tangir, Garbi Kohistan, Kundin, the non-Kho localities of southern Chitral and of Gujjar settlements.

Weeding of crops, which is invariably women's work, in an intensive feature that is observed in Hunza, Nagar, Gilgit, Pinnacle, among the Kalash and Bashgali, and in some Kho localities. It is seldom practised in the non-Kho localities of southern Chitral, nor in Kohistan or Shinaki, although it is reported from Darel. It is probable that the predominance of grains in these southern districts makes for less necessity for weeding, but the crop may benefit by being thinned. Weeding and thinning are usually associated, and in Hunza, Gilgit and Pinnacle it is reported that grain crops are sown thick especially to provide thinnings for fodder. Scarcity of fodder therefore favours thinning and weeding.

The Upper Altitude Limit of Double-Cropping

A means by which output can be increased, and which has both an intensive and an extensive character, is the raising of the uppermost margins, both of all cultivation and of double-cropping. In general yields decrease with altitude, and above 8,000', if temperatures are low in the early autumn, even a single crop may not ripen completely, and yields may be reduced. This was reported to happen occasionally in 35 of the 36 villages above 8,000' for which data were collected. For this reason there was formerly a tendency not to settle at these higher altitudes, although cultivation is fully practicable there. There thus remained the unexploited 'niches', especially in Guzjal and parts of Chitral, that have been filled by immigrants (see p.45 above), and subsequently, during the present century, by migration from lower altitudes.

The limit of double-cropping falls between 6,000' and 8,000'. Variation within 2,000' is made possible by the cultivation of crops with differing rates of maturing. Of the two common spring crops, barley matures more

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55 In Nagar there is a celebration to mark the onset of the weeding season.
56 Clark and Haqwal, 1964, p.42, have stressed the importance of weeding of crops in order to maximize yields.
57 Jottner, 1960, p.129.
58 Stein, 1921, I, pp. 50-1; Israr-al-Din, 1965, p.104.
Table 7  The varying upper altitude limits of double-cropping.

<table>
<thead>
<tr>
<th>District or locality</th>
<th>Inhabitants</th>
<th>Upper altitude limit of double-cropping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunza</td>
<td>Burusho</td>
<td>8,000'</td>
</tr>
<tr>
<td>Tarich</td>
<td>Kho</td>
<td>7,500'</td>
</tr>
<tr>
<td>Gupis</td>
<td>Yeshkans and Shins</td>
<td>7,300'</td>
</tr>
<tr>
<td>Nagar 62</td>
<td>Burusho</td>
<td>7,000'</td>
</tr>
<tr>
<td>Bachi, Bamberot and</td>
<td>Kalash</td>
<td>7,000'</td>
</tr>
<tr>
<td>Nubor valleys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bagrot</td>
<td>Yeshkans (and Shins)</td>
<td>6,800'</td>
</tr>
<tr>
<td>Bara Mosh 63</td>
<td>Shins (and Yeshkans)</td>
<td>6,800'</td>
</tr>
<tr>
<td>Mulikho</td>
<td>Kho</td>
<td>6,700'</td>
</tr>
<tr>
<td>Kinsu</td>
<td>mostly Yeshkans</td>
<td>6,400'</td>
</tr>
<tr>
<td>Dane Nisor</td>
<td>non-Kho of southern Chitral</td>
<td>6,400'</td>
</tr>
<tr>
<td>Niat valley</td>
<td>Shins</td>
<td>6,000'</td>
</tr>
<tr>
<td>Tangir 64</td>
<td>Shins and Yeshkans</td>
<td>6,000'</td>
</tr>
</tbody>
</table>

62 Nagar is one of the few districts where aspect is reported to affect cultivation, in that the physiological limit of double-cropping may be lowered, but it is reported that a lower degree of insolation does not result in lower yields relative to neighbouring villages.

63 Wilde, 1950, p.290.

64 Wilde, 1950, p.292.
quickly than wheat, while in the autumn millet matures more quickly than maize. Panicul millet 59 is less easily damaged by cold than spotted millet but both mature less quickly than buckwheat. Sweet buckwheat matures less quickly than bitter buckwheat. Since the rate of maturing is roughly in reverse order to the 'quality' of the grain 60 the faster growing species are not otherwise favoured.

All informants agreed that two crops give a higher gross yield than only one even when maize is limited, providing that the appropriate crop is grown in relation to the supply of manure and the date of sowing. For example, the bitter (panicle) millet requires less isolation than the sweeter (spadix) variety, while bitter buckwheat can be grown on poorer quality soil than sweet buckwheat.

In some districts, e.g. Tangir 61 and Chilas, the change from two crops per year to one occurs as low as 6,000', and is direct from wheat followed by maize to wheat or maize as a single crop. In other districts double-cropping occurs up to slightly higher altitudes because one faster-maturing crop is grown - maize is preceded by barley, or wheat is followed by millet or buckwheat - as in the Zalesh valleys and in Gojal. Between 7,500' and 8,000', in nearly all of the region, only one crop is raised, but in some villages in Chitral and in Hunza two crops are grown at this altitude - wheat followed by buckwheat, or barley followed by millet. The extreme development is found in Baltit at 8,000', where barley followed by buckwheat represents the physiological limits of double-cropping. In Table 7 (opposite) the districts and localities for which there are data are arranged in order, according to the altitude of the highest village where double-cropping is practised. The variation conforms to the general pattern of varying intensity of cultivation.

59 Descriptive terms are used to avoid confusion. These millets are probably Imperata cylindrica and Setaria italica respectively; Raffan et al., 1939, p.31.

60 I.e., 'quality' by most regional tastes, and not by relative dietary values. See also Clark and Haswell, 1939, p.53.

Divisions of Labour

Of the variables that appear to have influenced cultivators in their season-by-season application of labour to each crop, and their allocation of complementary resources, some have already been considered, in particular the varying pressures of populations and the question of security of ownership and usufruct.

Another important variable is the extent to which women contribute labour in the fields. The greatest contribution is made by Bashgali women who do what is elsewhere the work of men, e.g. tending the crops, carrying loads and even assisting with ploughing.65 The only processes of cultivation performed by men are the supervising of ploughing, and the threshing for which there was formerly a prohibition for women. By this particular division of labour it is unlikely that total labour inputs for cultivation are much increased, but among the Ismailis and Shias, and especially among the Kalash, the women make a significant additional contribution to the lighter tasks of cultivation. This is also reported from Mandi and Darel, but in most Suri districts, especially in Shikari and among the Gujars, the women have less concern with cultivation.66

The division of labour between farmer and labourer, and the division of usufruct between landlord and tenant are also significant in several districts.

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65 This division of labour may have been appropriate to conditions in Haristan, when the men were often away, raiding, hunting and herding; No Nair, 1954, p.10; Morgenstierne, 1932, p.43. Schonberg, 1938, p.171 mentions the former prohibition (still extant among Kalash), of women taking part in herding. According to Issar ud Din, 1969, p.91, those Bashgali who have large holdings marry more than one wife in order that their land may be cultivated intensively.

66 See also Barth, 1956–, p.77. It is possible that it has been with the breakdown of isolation of the Shikari communities that women have tended to be seconed to a greater extent; Leitner, 1877, p.39; See also Noves, 1913, pp.116, 152. Continuing xenophobia in Darel and Darel may favour cultivation by women in these two districts.
Where a steward is employed to supervise an estate, as by members of the ruling families and upper classes, and where servants and labourers are given long-term employment, have an assured income however small, receive food and clothing, become members of their employer’s household and have in addition the prospect of acquiring a small holding - as is the common traditional arrangement in the principalities - then cultivation is probably as intensive as on owner-cultivated land. Similarly, a second kind of arrangement characteristic of the principalities - where a landlord has outlying estates on which he does not reside, but gives them over for cultivation by tenants on a crop-sharing basis - is also, in general, favourable to a high intensity of cultivation, if not to long-term improvements. But tenants and labourers make up a small proportion of the populations in the principalities, except among the non-der of southern Chitral. There, and in the nomad/halves communities, especially Kohistan, Chilas and Tangir, labourers are employed in considerable numbers.

Most informants agreed that labourers do not produce such high yields as cultivating farmers and tenants. A few reported that they had employed labourers to cultivate and had themselves taken livestock to the pastures but had found that the grain production was then so low that it became necessary for them to remain in the village and cultivate or supervise themselves.

Given the state of indebtedness to their employers which Jettmar describes as being common in Tangir, and the small stake that labourers there have in the cultivation - performing only manual labour and remaining through the hot summer to water the crop, with no prospect of acquiring land of their own, or of permanent employment and regular income, and receiving at best only ½ of the crop, and sometimes only one-eighth - it can be seen that incentives to maximize production are lacking.

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67. Khalid Ashraf, 1963, p.17, in whose sample of the farm families ofauri Kohistan only 8% were non-owners of land, although it is possible that some part-time or seasonal landless labourers are excluded by his definition of farm family (p.8), although of.. Khalid Ashraf, 1962, p.69 where he states that 92.6% of the population earn the major part of their living from agriculture.

68. Jettmar, 1961, p.34.

69. Not all labourers are so depressed; Jettmar, 1961, p.34, also mentions that those who are permanent residents and who have some resources of their own, e.g., cattle, may receive a regular share of the crop for their labour - perhaps a third or even a half where they provide their own draught-animal.
Jettmar has described a sequence of events that indicates that in Tangir at least, the employment of immigrant labourers is comparatively recent. He suggests that it has been facilitated by the spread of maize, which requires less attention than other crops, and which is especially suited to cultivation by labourers. In contrast, and despite the similarities of altitude, topography, resources, and political organization, Darel farmers do not employ labourers but continue to perform the cultivation themselves. Nor do they follow the same pattern of livestock herding as the Tangirs. Jettmar suggests that these are conservative features, typical of the generally conservative and xenophobic character of the Darel community, one consequence of which is that labourers are not permitted to enter the inhabited areas. Cultivation by farmers in Darel is associated with the raising of two crops a year, a much greater labour intensity than in Tangir, and a greater variety of crops. According to Jettmar's data this was formerly characteristic of Tangir.

If Jettmar's interpretation is correct, the change in Tangir from farmer-cultivation to labourer-cultivation must have been accompanied by a considerable fall in grain output, since maize as a single crop gives a considerably lower yield than the total of any two crops grown consecutively. There is likely to

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70 Jettmar, 1960a, p.30 ff.

71 The conservatism of Darel is expressed in the survival of the settlement pattern introduced by the Pathan missionaries - i.e., a fortified village centred about the mosque - and in the continuance of shek until only a generation ago. The Darel jirga continues to be influential and effective; this in itself has been relatively more favourable for cultivation: Jettmar, 1960a, p.129. All this is in contrast to the situation in Tangir, where a new dispersal of settlement is taking place and where, perhaps since Pathan Wali's reign, there has been a greater measure of change; Jettmar, 1960a, pp.130-1. The xenophobia of Darel may be compared with Siiger's information about the Kalash: Siiger, 1956, p.28.

72 There are indications in Gwair Kohistan of a relatively recent period when wheat was much more widely grown there than now. See also "The Mullah's Narrative", 1880, passim.

73 Cf. Jettmar, 1960a, p.32, who suggests that the level of output would not have changed greatly, but this is contrary to data collected in the region and to the information of Barth, 1956b, p.1084. It is possible that the south of the region is especially suited for maize cultivation.
been a reduction in the food supply first at a time when labourers were being added to the population. How this change was financed is therefore not clear, unless there was a compensating increase in the size of flocks and herds. Assuming that pasture and fodder resources were adequate, an increased number of individuals going to the pastures would have permitted the maintenance of larger numbers of livestock.

The breakdown of xenophobia in Tangir was necessary before labourers could be admitted; the appearance of labourers seeking employment was also necessary. Most are Gujar and Kohistani. The Gujar have moved north into Dardistan in large numbers only within the last two centuries. The movement of Kohistani may have developed after the rifle brought a new and more dangerous element into the feudal. As Jeffreys mentions, many of the Kohistani labourers of Tangir are refugees from Farsa, and many of the labourers encountered in Chilas and Gauri Kohistan had similarly fled from a feud in Mandia or elsewhere.

Another and more specific cause of low labour inputs which is relevant for some parts of the north, and especially for Kohistan, is the alleged addiction of the inhabitants to opium. It has not been possible to visit Kohistan, and little precise information on this point was available, but according to the result of an informal survey made recently by the village-AID organization, 141 persons were found to be permanent physiological addicts, while a large part of the population of both sexes are to some extent addicted. The resultant inertia is reported to be a cause of low intensity of cultivation and a lack of enterprise. Opium-cultivation is widely practised in Barochil among the Tajik, where it is said to alleviate the long and extreme winter. It is also present in Yarkhan and other isolated instances have been recorded. Drug-taking in any form is rare outside Chitral and Kohistan, and is unknown among the asephalous communities or the Kalash, Bashgali and Gujar.

The data that are available indicate that many variables have influenced, and are continuing to influence, the allocation of 'communities' resources and the exploitation by them of the possibilities for agriculture. If variables could be discounted, the establishment of security with its
Frequent concomitant, an increasing population, would probably be shown to have the greatest influence in favour of raising the output of grain, fruit and other crops. Other variables intervene however, with results which, in the absence of more specific data, can only be assessed qualitatively.

It is suggested that a propensity towards cultivation and horticulture may be associated with some groups - in particular the Burusho, Iashans and Kalash. Among these, the ethos favours high labour-inputs and the maximization of grain and horticultural output. In Hunza, Nagar, Diamal and in parts of Gilgit and Chitral a farmer who organizes his resources efficiently and achieves high yields is respected for this; in the octagonal communities there is a general belief that all cultivators possess equal skills and industry and that, external factors being uniform, higher yields are a matter of chance only.
CHAPTER 9  LIVESTOCK - HUSBANDRY

i  Livestock and other Domestic Animals.
ii  Summer Pasture and Winter Fodder.
iii  Shepharding in the Principalities.
iv  Transhumance in the Acephalous Communities.
v  Pastoral and other Propensities.

Livestock and other Domestic Animals

The second ubiquitous agricultural asset of Dardistan is livestock, among which cattle, goats and sheep are most numerous and widespread, at least a few of each being owned by almost every cultivator. Even landless labourers usually have a milch cow or goat, while a farmer's livestock may number from 1 to 6 cattle and from 10 to 50 goats and sheep. It is these three species that have provided the complementary resources for cultivation - the draught power and the manure - and that have contributed to the self-sufficiency of local populations by providing both additional foodstuffs, in the form of meat and dairy produce, and also wool, hair, and hides for clothing, furnishings and implements.

Milk yields vary from beast to beast and depend on a number of external variables. The average daily yield for cows is about 5 pints and the period of lactation is 6 months or more. She-goats yield

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1 'Livestock' is used of members of the family Bovidae, i.e. it includes the domestic cow and bull, the buffalo (Bubalus), the yak (Bos grunniens), and domestic sheep and goats. Of these, the cow and bull are designated 'cattle', as distinct from buffaloes, yaks, sheep and goats. Bulls are not necessarily castrated before being employed for draught, but most of the draught animals are bullocks. Cattle are of several mountain varieties, and are generally small in size. (See photograph 6 opp. p. 58). Goats and sheep vary in size, and are similarly of various strains; one of the goat strains is associated with the Gujeris and another with the Kalam. See also Paffen et al., 1956, pp.51-2. Fat-tailed sheep are present only in small numbers in Ishkoman and Baroghil.

2 Data collected in the region for milk and wool yields agree with those given in 1917 for Gilgit and Astore: Thakur Singh, 1917, p.55.

3 See also Arnold Scheibe, "Die Landbauverhaltnisse in Nuristan", Deutsch im Hindukusch, 1937, p.130 cited by Snob, 1962, p.54. E. Lorimer, 1939, p.86, suggests lower yields for Kunza. The average daily yield is comparable with data for Kashmir: Lawrence, 1895, p.359, but is considerably less than average yields in the Punjab: see, e.g. Akhtar and Arshad, 1960, p.76.
about 1.5 pints daily for 4–6 months. Goats are usually clipped twice a year and give about 6 lbs. of hair per clipping, while sheep are shorn twice or thrice, each shearing yielding about 3 lbs. of wool. A cow, a bullock or a donkey produces 60–80 cu.ft. of manure (including stall-litter) in a 6-months winter season of stall-feeding, while a horse may produce 100–120 cu.ft. The manure output of goats and sheep is about one third that of a cow, but their manure is reckoned by all cultivators to be three times as efficacious.

Other animals have also been kept, but have not been universal, and are either alternatives to cattle, occupying an equivalent position in the organization of agriculture — i.e. the yak and buffalo, — or they are additional to the basic regional pattern of mixed agriculture, and are not necessary to the balance that cultivators tend to maintain between cultivation and livestock-husbandry. Buffalo and yaks are both found in small numbers, but are restricted both geographically and by altitude. A few buffalo are kept in Indus Kohistan, but the animal is essentially associated with Gujara. Buffaloes are not amenable to extreme cold. Yaks are associated with the Wakhi immigrants of the northernmost valleys (see photograph 20 opp. p. 175), and do not thrive below about 9,000 ft due to the higher temperatures of lower altitudes. Where they are present, both are usually herded together with cattle. Together their numbers probably do not exceed 1% of the total regional cattle population.

Donkeys, whose numbers are also small in relation to cattle, are more widely spread. The donkey is the traditional beast of burden and will carry 2 maunds. They are also sometimes employed in threshing (see photograph 6 opp. p. 58), but are not ridden except by children. In the past their usefulness was limited by the state of tracks and the infrequency of load-carrying between settlements, but they have also been kept for carrying within villages; e.g. grain from the threshing floor, flour from the mill and also firewood from the nearby

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4 See also Scheibe, 1937, p. 130, cited by Sney, 1962, p. 54.
5 C.F. E. Lorimer, 1939, p. 210, who reports a large cow's manure output at 1 cu.ft. per day.
hillsides. Where pasture and fodder are plentiful most cultivators reported one donkey; in other districts there were only two or three among a dozen households, and a greater proportion of load-carrying was done by cultivators themselves.

Horses have generally been fewer. In the accephalous communities and among the minority groups of southern Chitral, including the Kalash and Bashgali, they were absent altogether during the 19th century. In contrast, one or more horses were socially indispensable for members of the upper classes and aristocracy of the principalities. Horses have also been kept in some principalities for load-carrying, especially after permanent roads were constructed and regular traffic established, as through Astor at the beginning of the 20th century. A horse carries a load of 3 maunds on a well-graded road.

Dogs are occasionally kept as guards for livestock and by members of the upper classes of the principalities for hunting, retrieving, etc. Chickens are kept in nearly every locality for eggs and meat, but they are nowhere maintained on a large scale. It is known that they have been considered unclean among Shina, Burusho, Bashgali, and Kalash. This prejudice has broken down except among the Kalash, who seldom keep them. Chickens are also less common in Hunza, where reluctance to keep them has been attributed to the damage they cause to fields by foraging. They are absent in Karoghi and this is attributed to the length of the winter there.

The keeping of these animals - donkeys, horses and chickens -

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6 In recent years a few polo-ponies have begun to be kept in Shinaki. Mares are not milked by any group in Daristan, although the practice is well-established among the neighbouring Kirghiz. Mules are not kept, but they have been familiar in trade caravans from Kashgar and Srinagar and have been used by the garrisons. Mules are said to eat the same quantity as a horse without the advantage of being rideable.

7 Drew, 1875, p.428.
8 Lockhart and Woodthorpe, 1889, p.184.
9 Lockhart and Woodthorpe, 1889, p.184.
10 Schomberg, 1938, p.78.
11 Schomber. 1935, p.133.
<table>
<thead>
<tr>
<th>Animal</th>
<th>1905</th>
<th>1915</th>
<th>1921</th>
<th>1963</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Numbers</td>
<td>% of Total</td>
<td>Numbers</td>
<td>% of Total</td>
</tr>
<tr>
<td>Buffaloes</td>
<td>29</td>
<td>18</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td>5,796</td>
<td>72</td>
<td>12,164</td>
<td>83</td>
</tr>
<tr>
<td>Sheep, goats</td>
<td>25,623</td>
<td>73</td>
<td>72,385</td>
<td>83</td>
</tr>
<tr>
<td>Donkeys</td>
<td>506</td>
<td>1</td>
<td>966</td>
<td>1</td>
</tr>
<tr>
<td>Horses</td>
<td>672</td>
<td>2</td>
<td>1,376</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>32,493</td>
<td>100</td>
<td>77,214</td>
<td>100</td>
</tr>
</tbody>
</table>

15 Although it was possible to collect data only for Gilgit, the sizes of herds and flocks in Astore and Gilgit approximate to the same average sizes, so that the figures for 1963 are comparable with those for previous years. The 1961 figures are based on data concerning 7 villages, 21 cultivators of additional villages, and qualitative information.
although widespread, is incidental to the practice of mixed farming, and can be seen to have been subject to a number of cultural and social influences. While considerations of the same kinds can be shown to have affected the keeping of cattle, sheep and goats also, economic and agricultural considerations have been relatively more important, especially where flocks and herds have been small in relation to the size of holdings.

All landlords and cultivators appear to try, consciously or unconsciously, to relate a minimum number of livestock to their holdings to ensure an optimum level of crop production. How far, if at all, they keep livestock in excess of the minimum may depend upon a number of variables: the availability of irrigated land; the supply of family or other labour; the length of the winter period during which livestock must be stall-fed; individual rights to pasture and the scale of local pasture resources; and, among some groups and in respect of some animals, certain non-economic social and historical propensities.

There has been no count of livestock for the region, and no officially-published data except for occasional reports for Gilgit and Astor in connection with Settlement and population census operations. These are set out in Table 8 opposite, together with estimates of the average size of present flocks and herds in Gilgit. The figures illustrate the preponderance of goats and sheep, a general regional feature. Information collected for other districts suggests that the figures also roughly represent the livestock situation in the remainder of the Gilgit valley, in the Hunza valley, and in Turikho, Mulikho and Yarkhun. In the asephalous communities and southern Chitral the average number of sheep and goats per landlord and cultivator has been higher.

The apparently rapid increase in numbers between 1893 and 1915 is accounted for largely by more complete enumeration. In general the information available suggests that livestock numbers have not been increasing in recent decades as rapidly as the population, but that total numbers have increased considerably since 1900. Probably the

16 Thakur Singh, 1917, p.52.
overall rate of growth, in the Gilgit valley and Astor at least, has been comparable with the rate of increase of total cultivated area, but the data are insufficiently complete to demonstrate this. Within the post-Partition period the number of horses has decreased as mechanical transport has become available and court life has declined.

**Summer Pasture and Winter Fodder.**

Although it is possible to consider the variation in numbers of livestock by districts and groups, there is also a considerable range of variation at lower levels, as between one village and the next and between one cultivator and another. Data for Hakim village (table 9 below) illustrate the range of variation in the sizes of flocks and herds within a village in the Gilgit valley.

<table>
<thead>
<tr>
<th>Households selected at random from a total of 44</th>
<th>No. of household members</th>
<th>Adult male agricultural workers</th>
<th>Size of landholding (acres)</th>
<th>No. of cattle owned</th>
<th>No. of goats and sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15</td>
<td>3</td>
<td>1.8</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>B</td>
<td>10</td>
<td>2</td>
<td>3.5</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>C</td>
<td>13</td>
<td>2</td>
<td>3.3</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>1</td>
<td>1.5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>E</td>
<td>5</td>
<td>1</td>
<td>1.5</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>F</td>
<td>11</td>
<td>1</td>
<td>2.8</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>G</td>
<td>9</td>
<td>1</td>
<td>3.5</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>H</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>J</td>
<td>5</td>
<td>1</td>
<td>1.5</td>
<td>1</td>
<td>Nil</td>
</tr>
<tr>
<td>K</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>L</td>
<td>12</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>(20 in the process of sale)</td>
</tr>
</tbody>
</table>

**Table 9. Livestock, land, and household membership reported by a random sample of farmers at Hakim.**

Informants stated that, in the principalities at least, cultivators with more land tend to have larger flocks; it is possible to interpret
this in terms of the complementary productive relationship that exists between land and livestock. Informants also stated that those cultivators with a large number of household members tend to have larger flocks since there is then more labour available for herding. However the number of individuals in a household, or the number of adult men present, does not necessarily indicate the labour available for herding. There are varying divisions of tasks between the members of households; there is the practice of exchanging labour between households; in the principalities there are customary arrangements whereby individual cultivators entrust their flocks to a shepherd for the summer grazing season; and in the shepherded communities there is the system whereby cultivation is left to labourers so that farmers, landlords, and the members of their households are able to give all their labour to livestock husbandry.

A more general and more important limitation upon the sizes of flocks and herds is imposed by the food supply. Informants stated that for the majority of villages it is winter fodder that is in limited supply, and many cultivators reported that this prevents their flocks and herds being increased above a minimum required for the processes of cultivation and daily domestic milk requirements. Equally important for a number of villages is the availability of summer pasture.

In the principalities at least, the extent of summer pastures does not result in variation in the sizes of flocks between farmers in the same village. Pasture is the communal property of the inhabitants of the village and, although it is strictly the criterion of landownership that determines the right to a share, in most localities landless labourers and tenants are also permitted to utilize it, although there may be an implicit assumption that such individuals will not graze more than a small number of animals. All those who own land have equal rights; there is no subdivision or any limit to the number of animals for any one household. 17

17 When it was suggested that this was to the advantage of those with the largest flocks, informants maintained that if there was competition for grazing among the animals, then the larger flocks would be at a disadvantage.
Similarly in the accephalous communities, rights to a share of pasture accompany rights to land but, with larger proportions of landless in some communities, there is a generally greater degree of inequality in the sizes of flocks and herds within any locality. Milch animals can be kept in the village throughout the year, but it is apparent that labourers have seldom had significant numbers of livestock. This is illustrated by data collected for 5 villages (see table 10 below), where all landlords and farmers possessed flocks of goats and sheep, but where the landless had very few animals or none. There is a greater degree of inflexibility in the arrangements governing access to pastures by individuals; for instance, Barth has recorded that in Indus Kohistan the pastures are clearly subdivided between socio-economic groups and are reallocated at intervals — an extension of wash. 18

<table>
<thead>
<tr>
<th>Village</th>
<th>Group or community</th>
<th>Total No. of households</th>
<th>Total No. of landowners</th>
<th>Households with flocks of 100+</th>
<th>10-100</th>
<th>0-10</th>
<th>Landless households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gutz</td>
<td>Gawri</td>
<td>400</td>
<td>270</td>
<td>100</td>
<td>170</td>
<td>130</td>
<td>130</td>
</tr>
<tr>
<td>Gabriel</td>
<td>Kandia</td>
<td>120</td>
<td>100</td>
<td>10</td>
<td>90</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Duai</td>
<td>Chilas</td>
<td>20</td>
<td>11</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Lachigram</td>
<td>Non-Kho of southern Chitral</td>
<td>80</td>
<td>30</td>
<td>Nil</td>
<td>30</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Ashret</td>
<td>Dungarik</td>
<td>400</td>
<td>300</td>
<td>100</td>
<td>200</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 10. Ownership of land and flocks in five villages of Kohistan, Shinaki and southern Chitral. (All figures approximate.)

Although intra-village variation in the principalities may be less, between one village and another there may be wide differences in the average sizes of flocks and herds as a consequence of the varying areas of pasture to which villages have rights. The area traditionally allotted to each village bears no constant relationship either to the size of the village or to the area allotted to those adjacent. Where

18 Barth, 1956a, pp. 32, 34; see also Jettmar, 1960a, pp. 129, 134n; Snou, 1962, p. 56.
villages are situated at the mouths of uninhabited tributary valleys, the villagers generally have the right to the pasture (and to the woodland) within that valley. Such a division according to topography makes for unequal areas of pasture in relation to village sizes. Inequality is also observed in the allocation of pasture where the boundary is not a watershed or natural pasture - as in the division between the contiguous villages of Cwir, the allocation of the Shandur and Kargah pastures, and the division of the pasture of large tributary valleys between the villages located therein, e.g. the Kiner, Lungol and Bagrot valleys. The pastures belonging to some villages are long distances away, and may even be in another locality. The villagers of Khomar have pasture in the Kargah valley, up to 30 miles away, and the villagers of Brok and Brosh have pasture-rights in the Golen valley. Pasture located more than a day's journey from a village was reported several times.

The boundaries between pasture areas appear to have been settled generations ago. No information was available on how the allocation was made, but it seems likely that initially, as with the distribution of land and irrigation water, descent organization had much to do with it. It is not known whether all settlements inhabited by members of the same group at one time had areas of pasture which were roughly in relation to their numbers, but it is certain that there is no provision for readjustment with differential village growth rates. At the present time, some villages have ample pasture and may even rent some of it; while others, sometimes in the same locality, have insufficient. The small number of livestock in several of the villages for which data were collected was directly attributed to scarcity of pasture - instances are Gokhir, Parich, Miragram, and Parkhanandeh. Shortage of pasture is one reason for the generally lower average size of flocks in the Kho villages of lower Chitral as compared to nearby villages inhabited by

19 E.g. the villagers of Singal receive approximately Rs. 1,000 per year from other villages of Purniial for allowing animals to graze in the Singal valley, the villagers of Sorich exchange grazing for grain with neighbouring villages, and other examples were recorded.

20 Parich and Sorich are within 5 miles of each other.
Table 11. Approximate average number of livestock per landowner by districts and localities for which data are available.23

<table>
<thead>
<tr>
<th>Districts and Localities</th>
<th>Cattle</th>
<th>Goats and Sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilgit town and locality</td>
<td>2 - 4</td>
<td>0 - 20</td>
</tr>
<tr>
<td>Burusho localities of Hunza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mulikko, Turikho, Yarkhun25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kho localities of lower Chitral (i.e. from Baramnis southwards)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lutkun27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bashgali, Falkash and non-Kho localities of southern Chitral, Madaglaht28</td>
<td>4 - 6</td>
<td>20 - 40</td>
</tr>
<tr>
<td>Gupis, Punial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bagrot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chilas29</td>
<td>4</td>
<td>40 - 50</td>
</tr>
<tr>
<td>Gawri Kohistan29</td>
<td>8 - 12</td>
<td>40+</td>
</tr>
<tr>
<td>Kandia31</td>
<td>8 - 12</td>
<td>50+</td>
</tr>
</tbody>
</table>
Most of the figures are calculated from data collected in the region, and refer to the present, as do the data of Israr-ud-Din and other authors. It is possible that individual farmers' flocks and herds have slightly decreased in average size since the early decades of the century, but the figures can be taken to represent the 20th century, with the possible exceptions of Gilgit town and the Kho villages of lower Chitral. Some farmers living in the bazaar vicinities - i.e. Gilgit town, Chitral town, Drosh - are now following an additional occupation, and as a result of this are reported to have reduced their flocks. Thus it is probable that in the earlier decades of the 20th century the average sizes of flocks in these two localities were slightly larger. The numbers of cattle are reported to have been unaffected, or even to have slightly increased whereas goats and sheep have become fewer.

E. Lorimer, 1936a, p.178; Paffen et al., 1956, pp.31-2.

See also Israr-ud-Din, 1965, p.160.

See also Israr-ud-Din, 1965, p.160.

See also Israr-ud-Din, 1965, p.160.

See also Israr-ud-Din, 1965, p.160. Scheibe, 1937, p.136, cited by Snouy, 1962, pp.50-1, gives the maximum livestock holdings in Bashgal as 120 cows, 150 sheep and 300 goats. The Cambridge Chitral Expedition, n.d., p.13 gives 5 - 6 cows and a flock of 60 as being the average for Kalsah farmers.

See also Ahmad Ali Khan, 1884, p.2.

See also "The Mullahs' Narrative", 1880, p.xxii. Khalid Ashraf, 1963, pp.137-41, gives figures for Gawri Kohistan, but does not show the distribution of animals between the households of his sample. Even allowing for minimum numbers for landless labourers, the total number of animals appears small and is inconsistent with other data collected and with the extensive pattern of transhumance observed.

Earth, 1956a, p.27 gives figures for Fatat of 11 cattle (and buffaloes) and 20 goats and sheep, but it is not clear whether these refer to all village households or to landowners only.
other groups: the latter and the associated pastures are mostly located within tributary valleys, whereas a number of the Kho villages are in the main Chitral valley, so that their pastures tend to be either less extensive or more distant. (See table 11, opposite and n.)

A new village may have no pasture rights at all. Orakhundas, at the south of the Bagrot valley, is newly settled by Burusho migrants and Bagroti: the Burusho have no local pasture rights by virtue of residence in Orakhundas, whereas the Bagroti have retained land in their ancestral villages and so have rights to the pastures of Bagrot. Some Burusho farmers have a few pastures which are fed within the village, but altogether they have considerably fewer livestock than the Bagroti. No informant knew of any occasion when rights to pasture had been readjusted; local opinion was that they are immutable. Disputes between villages do occasionally occur, but concern the exact boundary rather than the ownership of large areas.21

On the whole, summer pasture is more plentiful in the south of the region. This is due to the slightly higher precipitation of the south and the consequently richer vegetation, and also to a greater proportion of the surface area lying at altitudes within favourable pasturage zones, i.e. between 11,000 and the permanent snow-line.

However, where the livestock food supply was reported to limit the number of animals, it was more common to find that the limit is imposed by shortage of winter fodder than by insufficient summer pasture.22 In this respect there is a general divergence between north and south, with a tendency for the flocks and herds of landowners to be considerably larger in the south. (See table 11 opposite). Most of the divergence between north and south and much of the variation between districts can be seen in terms of the supply of winter fodder. The length of the period during which livestock require stall-feeding depends upon the length of time that snow lies upon the pastures: this is determined

21 Longstaff, 1950, p.203, gives an example.
22 According to Barth, 1956b, p.1082ff. and Fautz, 1963, p.47, the shortage of fodder in Gawri Kohistan limits the sizes of flocks, so that summer pasture there is available for rent to nomadic Gujar who migrate from the region in winter.
by altitude and precipitation and is locally variable, but in almost
every locality some stall-feeding is necessary. 32 Where vegetational
features are unfavourable, as in the locality of Gilgit town and in
Hunza, animals depend in winter upon straw 33, crop thinnings and the
dried leaves of fruit-trees, willows, and poplars. 34 In parts of
northern Chitral, certain wild plants are cut in the pastures, dried
and carried, often for long distances, down to the villages for winter
fodder. In some districts where water and pasture are available, hill
slopes around the village may be irrigated and the resulting rich grass
crop cut for hay; this is practised in Astor, Nagar, Gwari Kohistan
and Baroghil. In some districts farmers grow fodder crops, chiefly
lucerne; this is reported from northern Chitral (excluding Baroghil),
Punial, Nagar and parts of Gilgit. Even a small area sown with lucerne
can add to the fodder supply considerably both in terms of bulk and
especially in supplementing the low dietary value of maize stalks and
straw. 35 Lucerne is especially valuable for young stock.

More important for the north-south diverseness than any of these
additional sources of fodder is the presence in the south and south-west
of holly-oak in the natural vegetation. This evergreen tree forms
dense forests in some localities, and is present in sufficient numbers
in all the Shinaki and Kohistan districts and in southern Chitral to be

32 Cattle consume 40-50 maunds of fodder each in a 6-month period of
stall-feeding, while goats and sheep eat about 12 maunds each in
the same period. The totals consumed vary according to the
nature and nutritive value of the fodder.

33 The straw yield is roughly twice the grain yield of the same crop.
Wheat gives a straw yield of the order of 40 maunds per acre,
maize of 60 maunds per acre.

34 See also E. Lorimer, 1936b, pp.239-40. It is customary throughout
the Gilgit and Hunza valleys to allow cattle to forage around the
villages during the period after harvest, until the spring crop is
showing above the ground. In this way, fallen leaves, stubble
and weeds on waste ground are utilized.

35 Lucerne can be cut 3-4 times a year, and each cutting yields, when
dried, about 40 maunds per acre. The crop has other advantages
in that it is perennial, and is leguminous and therefore beneficial
for the soil.
an important source of fodder for goats and sometimes for cattle also. It has been the distribution of this tree that has influenced the size of flocks more widely than any other variable in the food-supply of summer or winter. Its importance for livestock-husbandry has already been recognized by a number of observers, and larger livestock holdings are thus favoured throughout the south, relative to the north, by this particular feature of the natural vegetation.

**Shepharding in the Principalities.**

Larger herds and flocks in the south are associated with allocations of labour that are generally more favourable to herding than those of the north and that are often correspondingly unfavourable to cultivation. Customary arrangements vary from one locality to another, both as between the members of households and as between the members of the male agricultural labour force, but the general pattern of transhumance characteristic of the ahephalous communities is absent in the principalities.

Bullocks, dry cows, horses and ponies are taken to the pastures at the beginning of the grazing season and left to fend for themselves, with an occasional check from a herdsman. Goats and sheep are continuously accompanied by shepherds. Depending upon the distance to the pasture and its altitude range, they may be brought to the village at night or, more commonly during the summer months, they may be collected into byres in the pastures, the shepherds remaining in the pastures for weeks and months continuously. An experienced shepherd can attend to a flock of about 100. Milch animals required for domestic milking remain in the village if the household remains there. Bullocks, if they are required for draught, and donkeys also remain; donkeys are unable to defend themselves if left in the pastures unattended, and are not amenable to herding. The herding is mostly

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36 E.g. Stein, 1928, I, p.15; Jettmar, 1959a, p.124; Snou, 1959, p.525 records that "The great importance of the livestock in the economy of the Kalash is celebrated in their ceremonial system."

37 Bulls defend cows and calves from attack by leopards and wolves and in most districts there are few losses. In the remote Shah Jinali pastures however, annual losses of up to 14% are reported.
the work of men or boys, and taking the flocks to the highest pastures is always their work.

In Hunza, Nagar, the Gilgit valley and its tributaries, northern Chitral including Baroghil, and among the Bashkali and Kelaash, shepherds are normally local men or boys - younger brothers or sons, those with no responsibility for cultivation or with little land, or those with special aptitude - who take their family's flocks and may also take those of relations or neighbours. In some localities a small number of shepherds may combine and tend the individual flocks of all the inhabitants of the village, and may be then paid at some customary rate. At Minapin shepherds receive 10 lbs. of grain for each animal, and in the autumn they pay to the owner 4 lbs. of clarified butter per milk goat. In Hunza the shepherd brings 2 lbs. of butter per milk goat at the end of the season, and keeps the balance - about the same amount - as payment. 38 Where landlords employ servants and labourers, these attend to the herding of their employer's livestock in addition to cultivating his land.

The general characteristic of this division between shepherds and cultivators is its social informality and its flexibility. Those for whom it is convenient, or who are skilled, or who require additional employment go as shepherds, but there are no implications of prestige or status, and a man who tended his father's flocks may take to cultivation when he inherits his share of land, and send his younger brother or a son with the flocks.

The number of animals kept by any one farmer is thus not limited by the size of his household unless he is unable to make a satisfactory herding arrangement. A few farmers reported that they prefer not to entrust their flocks to shepherds who are not members of the immediate family circle, and keep only that number of livestock that can be managed by the household.

In some localities where there are Gujer settlements, or where nomadic Gujars habitually take their animals for summer grazing, local inhabitants may hand over their flocks to a Gujer shepherd for the

38 E. Lorimer, 1936b, p.247.
summer on terms similar to those described. This has become especially common in the main bazaar localities, where local residents may now have occupations additional to agriculture.

The pattern of movement upward in the spring, reaching the highest pastures in August, and then gradually descending in the autumn is seen to varying degrees all over the region, but the typical arrangement in the principalities is for the shepherd to be unaccompanied by other household members, and thus to represent only a small proportion of the total population. 39

Transhumance in the Acephalous Communities.

In Kohistan and to a large extent in Shinski and southernmost Chitral, the typical division of herding and cultivation is different. It is the landless labourer and the cultivator with few assets who remains in the permanent village and attends to the crop, with occasional visits from farmers and landlords; and it is the latter—the wealthy and the owners of large flocks—who, with the members of their households, accompany the animals to the pastures, sometimes remaining away from the permanent village for more than 6 months, and inhabiting temporary settlements according to the season.

Barth has described an extreme form of this transhumance observed in Patan. 40 Patan village is in the Indus valley at an altitude of about 2,500'. In the early spring, the village fields are sown with clover or grain 41, and rice nursery beds are prepared. In April or May, the main part of the population, men, women and children, move up to the 'maize belt' between 4,000' and 8,000', where fields are ploughed and maize is sown. In June the lower pastures, from 8,000' to 12,000', are progressively utilized until, in July-August, the snow has melted on the 12,000' - 14,000' pastures. Farmers return temporarily to the

39 Occasionally however, where a village has additional cultivated land above the main winter village, there may be movement of the village population on a larger scale from one area of cultivation to another.

40 Barth, 1956a, pp.20-3.

41 Fredrik Barth, personal communication.
village to prepare the rice-fields and transplant the seedlings, but otherwise only the labourers remain to attend to irrigation. From August, the main part of the population begins to move down again, harvesting the maize, and then finally the rice, in October-November.

The pattern of periodicity thus enables the population to utilize even the highest-lying part of their territory during its brief period of productivity. It also has the advantage of simplifying the combination of the agricultural and herding activities. In the period while the crop is in the fields, the herds, and with them most of the necessary daily work and majority of the population, are found up in the mountains, and no problem of fencing of fields or careful herding of the animals arises. The pastures that are found on the same altitude as the fields can, however, be utilized in the periods of seeding and harvesting respectively — which is also when a certain amount of animal labor for agriculture is required. 42

Such an elaborate pattern is found where the winter village is at a low altitude in relation to the highest pastures. From Patan village there is an 14,000' range to the snow-line, and such a vertical distance may represent several days' journey. Similar seasonal migrations are practiced by the landlords of Chillas village (4,100'), who leave the village in the early part of March and return at the beginning of December. At Basal (10,300'), the highest village visited in Chillas, the pattern was reported to be less elaborate. Although labourers were employed for cultivation, while farmers accompanied the flocks, their families remained for most of the time in the permanent village.

Transhumance of this kind — involving farmers and landlords — is found in the communities where labourers are employed for cultivating. Both features are absent in Darel. There farmers remain in the valley throughout the summer while the flocks are sent to the pastures in the care of younger men or boys, or even in the care of Gujars 43 — an arrangement more like that of the principalities. Jettmar has suggested that the continuance of this division of labour — which is

42 Barth, 1956a, pp.21-2.
43 Wiche, 1958, p.393.
older than that now seen in neighbouring Panjir - is an illustration of the conservatism of Parel.  

Apart from herding, there is generally more physical movement within their locality among the populations of the ascaphalous communities. Residence in more than one village is common, and at various times households move according to the season and the local climate. This introduces another aspect of transhumance not mentioned by Peth, but stressed by Stein and Jettmar, and frequently put forward by informants as favouring movement of the majority of local populations in the summer from villages at low altitudes, especially those along the Indus valley. The summer temperatures of the bottom of this valley are notoriously high, and the circulation of air is low. Mean daily temperatures that have been recorded at Chilas village and at Gilgit town show that for about three months the mean daily temperature of Chilas exceeds 83.6°F, the Gilgit town maximum. (See table 12 below).

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<td>Gilgit town</td>
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Table 12. Mean daily temperatures in °F for Chilas village and Gilgit town.

Stein has described how, when defence against inter-community attack was no longer necessary for Chilas after the 10th century, much of the cultivation in Chilas village was abandoned, the population

44 Jettmar, 1960a, pp.128,133. He has also suggested that a continuance of the ancient prohibition upon women coming into contact with flocks may favour shepherding exclusively by young men. A greater concern with flocks, which he suggests has developed in Tangir since the adoption of the new division of labour, may encourage pastoralism among farmers themselves, since herding is more readily combined than cultivating. In Jwari, Khoristan instances were given of how flocks had preoccupied those who spent the summer months in the pastures, and of how certain pastures were not used because of the scope there for ambush. See also Stein, 1922, I, p.17.

45 Land in different villages was also reported by farmers in the Bagrot valley.


47 From data provided by the Pakistan Meteorological Department.
resettling in the nearby tributary valleys. He attributed this process to the summer heat. Jettmar emphasizes the heat of both Darel and Tangir and, like Stein, mentions the insect pests, which were similarly observed in Chilas to be an inducement to move to higher altitudes during the summer. In the lower Chitral valley, south of Drosh, temperatures are also high. The mean daily average temperatures for Drosh (4,806') are almost the same as those for Gilgit town, but Arandu is 1,200' lower than Drosh, and is lower even than Chilas village. In the non-Kho villages of this locality and in the Dami Nisor valley there is a pattern of transhumance similar to that of Chilas and Kohistan.

Extensive transhumance is not confined to villages at low altitudes however. In Haramosh the heat of summer is said to favour it, and even in Gawri Kohistan, where winter villages are as high as 8,000', the same appreciation of the 'cool, fresh air' of the pastures was expressed. Since summer temperatures in Gawri Kohistan, Haramosh and the upper Tangir valley are considerably lower than in much of the settled part of the Gilgit valley and in many Chitral villages, it is likely that high summer temperatures are a contributory factor only for transhumance, as is also suggested by the anomaly of Darel.

**Pastoral and other Propensities.**

Physical mobility and seasonal migration are characteristic of two immigrant groups whose traditional economies are known to have been pastoral - the Wakhi and Gujars. It has been suggested both by early writers and by informants in the region that Shins (and, independently, that the Dungarkas of southern Chitral, who are of Shin descent), may also possess pastoral propensities and an antipathy towards cultivating.


50 Thakur Singh, 1917, p.51; see also Wichte, 1958, p.290.

51 E.g. Biddulph, 1880, p.73; Frontier and Overseas Expeditions, 1907, I, p.30; Neve, 1913, p.132.

52 See also Jettmar, 1960a, p.132.
The Gujars have exhibited the greatest degree of dependence upon livestock because they, unlike the Wakhis, have generally immigrated without acquiring land. Although a minority do now have permanent rights to land and others have taken employment as labourers, the majority remain nomadic or semi-nomadic. Some who remain exclusively nomadic are reported to possess as many as 1,000 goats and sheep, but few of these are permanent regional residents, and may migrate as far as Peshawar and Rawalpindi Districts in the winter.

Riddulph described the loose attachment to particular localities that is characteristic:

They attach themselves to no locality, though perhaps for a generation the same men frequent one pasture-ground, building rude hovels and making a poor pretence at cultivating small patches of ground; but a very small excuse seems to be sufficient to drive them, with their herds, in search of fresh pastures.  

In most localities, both in the principalities and in the acephalous communities, the Gujars are permitted to graze their livestock only on payment, and one reason for changing their summer pasture may be that the village with permanent rights to it may alter the terms under which Gujars may utilize it - such agreements are often negotiated every year. Another reason may be the 'failure' of a pasture, due to a winter of high snowfall or to some other climatic cause. As a consequence of their greater freedom of choice of pastures, Gujars are reported to obtain better grazing for their animals than those who have permanent pasture rights and who therefore utilize the same pasture each year.

This semi-permanent association of Gujars with localities has been observed in the upper part of the Shishri valley, above Mandasht, to which Gujars migrate in the summer (often taking animals belonging to the inhabitants of Dosh), and where their rough hutah and non-intensive cultivation is seen. In the winter they migrate to the south of the

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53 Riddulph, 1880, p.40.

54 For pasture in the Kargah valley Gujars pay 1 goat per flock of 100. In the Sewri valley of Gawri Kohistan they pay Rs.140, one goat and one numdah for a flock of 300 goats.

55 For grazing in the Shishri valley they pay - in this case to the Mehtar, whose property the pastures are - at a rate of 4 annas per head of cattle per season, together with additional payment in clarified butter for flocks and for cultivating.
state, and to the Drosh locality, where they have no land, but may have houses, and may hire a few fields, or purchase fodder. In some villages they make arrangements with cultivators to exchange manure for fodder, including holly-ash; in others they exchange clarified butter or other animal products for fodder, pasture and grain.

Apart from their ability to obtain better quality grazing, the Gujars are attributed by informants of other groups with particular skills in livestock-husbandry, and with obtaining a higher output from their animals. As an illustration they quote the Gujars' ability to maintain buffaloes, which are ill-adapted to mountainous terrain and cannot withstand the low temperatures in winter, but which give considerably higher yields of milk that has the additional advantage of a larger fat content. These buffaloes require constant watching lest they should wander onto unsuitable ground when grazing, and in the winter months it is necessary to keep their stalls continuously.

That a pastoral people may abandon nomadism when they obtain cultivable land is illustrated by the three-phase Wakhi immigration. Beyond cultivation there being intensive, little information is available about the agriculture of the Wakhi colony of Gujhal, established there more than 150 years ago, but Schomberg, generally an

severe commen... or, remarked that:

They have quite lost their former habits and have settled down to agriculture. Indeed, they have become model cultivators and their crops are excellent. They have, moreover, preserved their skill in tending cattle, a relic of their old pastoral life, and their flocks and herds are esteemed by the people of Hunza.

A skill in livestock-husbandry greater than among the Burusho was also attributed by informants familiar with Gujhal.

In Baroghil there remains a stronger tendency towards pastoralism, and it appears from description that the Wakhi of Ishkoman fall between

56 Thakur Singh, 1917, p.55 suggested that their milk yields in Astor and Gilgit are three times as high as those of cows. The average yield that he gives - 10 pints per day for 6 months - is considerably closer to that of buffaloes in villages of Lahore District: Akhtar and Arshad, 1960, p.76.

Gujjal and Baroghil in this respect. Flocks and herds in Baroghil were however found to be variable in size: the maximum per landowner was stated to be 100 cattle and yaks, 100 goats and sheen, and 50 fat-tailed sheep, but a minimum was recorded of one cow, the owner of which worked as a shepherd.

Relatively little labour is expended upon cultivation: the majority of the population shifts about according to the season and the state of the pastures, returning to a permanent house for the winter period which is exceptionally long. Hay is cut and may even be used as fuel as well as for fodder. Goats and sheep have to be stall-fed on hay and straw throughout the winter, but cattle, and particularly yaks, are often able to graze despite the long and heavy snow-fall. It appears that in the Pamir of Baroghil (and also of the north of Yarkhun), the pasture slopes are relatively gently-sloping for such high altitudes, and there is a tendency for snow to be blown off exposed surfaces by strong winter winds, so exposing the rich grasses of the Pamir.

In the same way that the Gujars increase their production by exploiting an animal which is especially associated with them, so the Wakhi exploit the yak, fully utilizing its several productive characteristics. A few yaks are kept by farmers of other groups at Teri, in the Laspur and Khot valleys, and in Ishkoman and Tamin, but according to Schomberg:

Their owners neither ride nor load them; they do not even collect their valuable hair, still less do they milk them.... These yaks are left in the upland pastures in a semi-wild state, and their owners only visit them either to kill one for meat or to brand a newly-born calf.... the only people who really use their yaks are the Wakhi...

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58 See also D. Lorimer, 1958, p.11; Iserar-ud-Din, 1965, p.160.
59 See also Schomberg, 1938, pp.152,251; Iserar-ud-Din, 1965, p.142.
60 Tilman, 1949, p.124 remarks on the high quality of Pamir pastures. The northern neighbours of the Wakhi, the Khirghiz ascend to higher altitudes in winter for pastureage: A. Austin Miller, Climatology, London, 1944 (3rd edn.), p.41.
61 Schomberg, 1935, p.93.
For the Wakhi & Karoghil yaks provide milk, cream, butter, cheeses, 
curd, meat, hair, hides, draught-power and animals for both load-carrying 
and riding: all the uses that Daryll Forde mentions in discussing 
pastoralism. 62

The special techniques and propensities of Wakhi and Gujars existed 
before their immigration. Where they became permanently resident in 
the region, both groups have taken up additional arable farming, though 
of a non-intensive character, and they can be considered as practising 
a mixed agriculture but with a conspicuous bias towards livestock-
husbandry. The possibilities for an exclusively nomadic existence in 
the region are limited, given the already existing pattern of mixed 
farming – i.e. the lack of scope for a complementary relationship 
between grain-producers and livestock-husbandmen – and given the 
preallocation of rights to all pastures. Although their techniques 
and nomadism may allow the Wakhi and Gujars to exploit fully whatever 
opportunities for obtaining pasturage are open to them, the overall scale 
of pasture resources per average square mile below the snow-line is 
less in the region that in the pasirs, and may be less than in parts 
of the Punjab. Also, in the Punjab, movement over longer distances with 
wider ranging in search of pasturage was probably more practicable.
The small – but in the 19th and early 20th centuries, clearly defined – 
niche for pastoralists is also being encroached upon by migration of 
cultivators from lower altitudes. This, together with growth in their 
own numbers, is reducing the per capita scale of resources available 
to the Wakhi and Gujars. Since mixed farming can support a denser 
population than pastoralism, this growing pressure of population in 
itself favours increasing dependence upon cultivation. 63

62 C. Daryll Forde, Habitat, Economy and Society: A Geographical 

63 Gujar informants familiar with both exclusive nomadism and mixed 
farming stated that cultivation can provide a form of security 
that is absent in nomadism – in the latter the risk of all 
agricultural assets being lost, e.g. from disease, is much greater. 
'Natural disasters' of this kind have probably contributed to the 
numbers of Gujars seeking employment as labourers.
The Shins, Dungariks, Kalash and Bashgali are also attributed by
informants with special skill and high labour inputs for livestock-
husbandry. The pastoral activities of the Bashgali have been
favourably commented upon by at least one agricultural authority. 64
For the Bashgali and Kalash however, the suggestion of nomadic
propensities has not been made, and informants were unanimous in stating
that the cultivation of both groups is intensive and relatively high
yielding. Other writers and data collected locally confirm this.
Informants attribute this 'double achievement' to the high labour
inputs by women of both groups. Among the Bashgali and in Chilas and
Tangir the amount of labour given by farmers to cultivation is low,
but whereas the Tangiris and Chilasins delegate the raising of only a
single crop of maize to labourers and are accompanied to the pastures
by their women, the Bashgali leave their women to perform the tasks of
an intensive and varied cultivation while the men are able to devote
their labour to livestock-husbandry and other activities. Similarly,
among the Kalash, labour inputs by women are high and, added to the
men's, result in cultivation and livestock-husbandry of a high quality.
Thus the division of labour between the sexes may be an important
factor, not only in terms of weeding, thinning, etc. and the degree of
intensity of cultivation, but also in how far it adds to total labour-
inputs and so makes possible a greater allocation for livestock-husbandry.

The choice between different kinds of animal and the division of
household labour between them has also been subject to certain restraints.
For example it is regarded in many districts as 'shameful' for men to
milk cows - this is invariably women's work, even where women perform
few other agricultural tasks. This particular instance is probably a
relic of a more general convention such as that which was characteristic
of the Shins until the beginning of the present century and which took
the form of a prohibition upon physical contact with cattle. This was
observed by Drew 65 and Biddulph; Biddulph reported that:

65 Drew, 1875, p.428. According to Lockhart and Woodthorpe, 1889,
p.184, similar conventions existed in Hunza and in Nuristan. Drew
suggested that there may be a connection between these ideas and a
reluctance to burn cow-dung; if this was so, the implications for
agriculture may have been very great.
... orthodox Shins will not eat beef, drink cow's milk, or touch a vessel containing it. A sucking calf or any portion of a dead animal, is especially unclean ... It is not uncommon for a Shin to make over his cow and calf to a Yashkun neighbour, to be restored to him when the calf is weaned.66

Undoubtedly in the 19th century such antipathy did not favour the keeping of cattle by Shins except for draught purposes, and although such ideas are no longer expressed it is likely that they continue to affect the division of livestock between one species and another. This particular instance may have made for the present-day difference between the Shiniki communities and the Bajgali and Kohistan communities in respect of sizes of herds relative to flocks. (See table 77 app. p. 165) For the Shin the goat appears to be more important in their ideas about wealth. Jettmar has suggested that the antipathy to cattle was the converse of the special status of the goat in ancient beliefs of Dardistan which were especially associated with the Shins.67

Whatever the nature and strength of such influences, there is little doubt that for all the acephalous communities, for the groups of southern Chitral, and for the Bajgali and Kalash, livestock have figured large in ideas about what constitutes wealth. This is agriculturally appropriate, relative to the northern principalities, given the more favourable vegetational conditions of the south. It is likely however that a number of other considerations have also been associated with the expression of wealth in the form of livestock. Some have already been mentioned; others may concern features of acephalous government itself, especially as regards its negative consequences for arable cultivation. It is suggested, for example, that the yezd system of land-holding, by which all members of a homogeneous landowning group had theoretically equal shares of land,

66 Biddulph, 1880, p. 37. Unfavourable attitudes towards chickens have been mentioned above (p. 159); Biddulph, 1880, pp. 37-8 records the absence of chickens in Shin districts in the 1870's.

may have encouraged the expression of differentials in wealth in terms of livestock.

If the form of government and ideas about wealth, prestige, etc., have significantly favoured livestock-husbandry in relation to cultivation, then it is clear that of the major groups, it has been among the Shin that such influences have been most conspicuous — not only among the Shin of Shinaki, but also for those of Gilgit, and the Dunguriks. On the other hand, among the Yeshkuns of Gilgit and the Gilgit valley, the ethos appears to have favoured cultivation. There may be validity in the assertion of informants and the statements of early observers that pastoralism occupies a more important place than cultivation in the Shin economy and that the reverse is characteristic of the Yeshkuns and Surushe. If this is a possible distinction, then between are the Kohistani who tend to pastoralism, and the Kho who tend towards cultivation.

If this is associated with the Yeshkuns as a group rather than with a particular form of political organization, then it may have had some part in the differences in agricultural practice which Jettmar describes between Tangir and Darel for, according to informants and to early authorities, the population of Darel is largely Yeshkun whereas that of Tangir is predominantly Shin: Riddulph, 1880, p.34; Stein, 1928, 1. p.40. Census data to confirm this is not available, but according to Riddulph the proportions in the 1870's were: Darel, Yeshkuns 50% and Shin 25%; Tangir, Yeshkuns 25% and Shin 60%. If this possibility is considered, it may be supposed that where the Yeshkuns are in a majority there has been a tendency towards cultivation, whereas in Shin-dominated Tangir and Chilas, farmers have delegated their cultivation as additional agricultural labour has become available. As inter-community conflicts have declined, so a 'nucleated' pattern of settlement with intensive cultivation becomes less appropriate, transhumance becomes possible, and the Shin can re-express pastoral preferences. However there is the immediate anomaly of Gor, which is predominantly Shin, but whose agriculture appears from qualitative information, to be more like that of Darel.
CHAPTER 10  NON-AGRICULTURAL OCCUPATIONS

i Crafts and Services.  
ii Crafts and the Remuneration of Craftsmen.  
iii The Dependent Status of Craftsmen.  
iv The Exploitation of Non-Agricultural Resources.

Until the present century opportunities for non-agricultural occupation have been very few. Where they have existed, individuals who have followed them have almost invariably combined them with cultivation.

The only institutional employers were the administrations of the principalities. Rewards for state officials were to a considerable extent non-economic, but political and social. Those who received temporarily the usufruct of mehrbani land doubtless also benefited economically during the period of tenure, but office-holders were expected to depend largely upon their own ancestral lands. The charchelo or lambadar who received 10% of a state tax levied at 10% on farmers' gross crop production would receive an income from his office greater than the average of farmers only where the village was a relatively large one. Among the achenalos communities the only equivalent office was jirgadar, for which there was no formal direct economic remuneration at all.

Apart from craftsmen the only individuals in the achenalo communities who received a regular remuneration from the local population were the mullahs, to whom each household contributed some amount of grain. In the principalities similar arrangements have existed and continue to do so, households paying up to 40 lbs. of grain a year according to their means and the number of members. In some principalities the mullahs have also received payment from the state government. In Chitral in the 1930's mullahs in charge of mosques received 2-3 maunds of grain a year although they were not classed as state servanta. Arrangements of this kind continue in

1 As mentioned by Biddulph, 1880, pp.42-4, 66-7.
2 Scott, 1937, p.20.
Chitral, where mullahs reported that they receive 1-6 mounds of grain a year from the state, and also receive a few lbs. from each household of their congregation.

Crafts and Services

Employment of a different kind has existed for individuals as providers of social technical skills and services. Some of these are directly associated with agriculture - e.g. the making of agricultural implements and the 'processing' of agricultural products - while others are non-agricultural, e.g. the provision of music for festivals and ceremonies, and the manning of rafts.

Many of the craftsmen following particular occupations belong to the minority groups, whose immigration in several cases was associated with the provision of their special services. The tendency where such immigration has not occurred has been for local agricultural populations to make their own division of labour: some services that require premises or tools (e.g. milling and smithery) being performed by a few cultivators, perhaps those with small holdings who follow this as an additional occupation; while other tasks have been performed by cultivators in accordance with the needs and abilities of their own household members.

Informal arrangements of this kind are common in the performance of certain agricultural tasks, e.g. the castrating of bulls or the grafting of fruit-trees, which may be done by any cultivator who happens to have the relevant knowledge and experience. Where such services are provided by neighbours, they form part of the general pattern of exchange of labour (and draught-animals) and of co-operation between households. Isolation and difficulties of travel must have favoured this self-sufficiency among small populations. The absence of specialized craftsmen groups is reported in many villages, especially in northern Chitral, and such groups are altogether absent in Gwari Kohistan. In some other districts the range of skills provided by immigrant craftsmen is limited, the agricultural population again fulfilling some
of their own needs, as in the Hunza valley.

In the Shina-speaking districts however, Doms and Kamina have been present for many generations, and the division of tasks between craftsmen and the remainder of the population has been longer established and is more clearly defined.

In most districts the provision of most of the special services has social and caste implications. It is not known whether such ideas were present before the immigration of the craftsmen - whether, for example, there was already a social impulsion attached to smithery among the Kho at the time of their spread into the Chitral valley - or whether ideas about the social inferiority of some occupations have spread subsequently and perhaps partly as a result of the appearance of specialist craftsmen. Biddulph suggested that the ideas were introduced by the Shina under whose nexus the Kamina and Doms may have been adopted as craftsmen and community servants.3

In general the social implications are more strongly felt in the areas where immigrant craftsmen are present and are weaker where they are few or absent. The latter is the situation in much of northern Chitral and among the Gawri, and may represent the older period of self-sufficiency. Among the Gawri the social status accorded a Gawri smith appears to be determined by local criteria to do with his descent and his holding of land, which in most cases is small - hence his adopting smithery as a source of additional income.

Whatever the origins of ideas about the nature of certain crafts, it has been in consideration of these that many alien groups have been encouraged to immigrate and settle in the region. There has been no long-term economic need for particular individuals to be brought in order to provide these skills and services - all are within the technical capabilities of the cultivators of the region and most are practised by cultivators in one or another district where immigrants are absent.

During the Islamic period, the caste associations have been losing ground, and especially during the present century. In addition, the

3Biddulph, 1880, pp.40-1.
presence in the principalities of some degree of social mobility must have operated against a completely rigid association of occupation and status. Lorimer mentioned that the functions of the Wericho in Hunza were changing and their status was rising. Nevertheless antipathy towards certain activities was presumably strongly felt, given the xenophobic attitudes of the acausal communities towards those who were not members of the landowning group, and given the general scarcity of resources throughout the region.

Several instances in the principalities indicate that the craftsmen were introduced at the specific instigation of rulers. Some were required to act as court servants, e.g. the Dom musicians of Hunza and the Katoce state, and the Kashmiri craftsmen of Gilgit. In another instance, a group of Tajik iron-workers were settled at Madaglasht after they had assisted a Mohtar in his succession by their special skill in gun-making.

Following the introduction of alien craftsmen a variety of contracts have been made between them and the ruler or administration, or between them and the agricultural population. The size of population served by a few households of craftsmen has varied, from a small village with its blacksmiths, to a community as a whole with its state musicians, but very seldom has even a single craftsman been employed exclusively by an individual household or on the estate of a single landlord. This is different from the situation that Barth describes in Swat, where craftsmen take a share of the crop of the landlord with whose labourers they work, and for whom they provide their specialized services full-time. Even the senior aristocratic landlords of the principalities have seldom employed more than a few general domestic servants and labourers, the most important of whose collective duties has been cultivation of their employer's land.

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4 D. Lorimer, 1935, I, p.xliii. See also Leitner, 1877, p.48n.
5 See also D. Lorimer, 1922, pp.127-8. It is possible that some of the immigrant craftsmen of the acausal communities became established there under the former centralized governments. A recent instance would then be provided by Pakhtun Wali's employment of Kashmiri craftsmen: see Jettmar, 1960a, pp.131-2.
A further dissimilarity from Swat is that almost all craftsmen have supported themselves to a considerable extent by their own agriculture, and have been granted land or the usufruct of land in order that they may do so. The opportunities for full-time employment in any craft occupation were almost none. The small size of settlements, the subsistence-oriented economy, the difficulties and high costs of travel and the distribution of most cultivated land among large numbers of small-scale independent cultivators (rather than a small number of estate-owners as in Swat) must have had much to do with this.

Crafts and the Remuneration of Craftsmen.

Where craftsmen have been settled by a ruler they have often been given, as their hereditary obligation to the state, the maintenance of their craft for the benefit of the population. In return they have land and they also receive some form of payment from those who benefit by their services. These payments have often been at a fixed rate per household per year. Similar arrangements exist in neighbouring regions, e.g. in parts of Iran, and in Lahore District, and are generally characteristic of the Jajmani system.

In a non-monetary economy the system of exchange of services on the Jajmani model must separate and clearly define the duties of each member of the system. The greatest degree of development in this appears to have been in Gilgit, especially in the vicinity of Gilgit town, where several craftsman groups - Kains, Doms, Sonewals, Kashmiris - were represented in the 19th century in sufficient numbers and collective versatility for them to have monopolized the occupations of blacksmith, carpenter, minstrel, potter, weaver, gold-washer, ferryman, silversmith, leatherworker and miller. But the system of

8 Wiser, 1958.
9 In the absence of currency and practicable exchange-media the complex JajMane administration similarly depended for its efficient operation upon the precise and specific subdivision of services and duties among the population.
fixed payments operated elsewhere. Even in those districts where craftsmen were few in numbers and were not necessarily members of a separate group, the services of smith and, where present, of minstrel and ferryman, have nearly always been fixed at an annual amount per household or per landowner.

The rates vary considerably. Smith households (irrespective of the number of members working as smiths) have usually received between 5 and 45 lbs. of grain per year from each household in the locality they serve, or alternatively, an amount assessed on each landowner or on each working plough. Data collected indicate that a total annual income of this kind falls between 20 and 28 maunds of wheat (or maize), irrespective of the total size of the settlement concerned; this suggests that the aggregate annual payment is first fixed and then subdivided between households or farmers. An income of this size may represent half or more than half of a smith household's annual grain requirements. In many villages the smiths, who are present in nearly every locality, continue to be paid at fixed rates - this is reported in Punial, Hunza, Nagar, Shinshi, Kandia, parts of Chitral, and parts of Gilgit.

The general tendency however has been for the system of fixed payments to break down, and during the present century an increasing number of services are paid for pro rata by individual transactions. Some services have for many years been paid for in this way, e.g. silversmiths' and millers', and often carpenters'.

Of the crafts that were practised in most villages, those of miller and carpenter appear to have had fewest social implications and to have been least associated with immigrants, although in Shina-speaking districts milling is often associated with Kamas. In most of the region carpentry is regarded as an occupation that can be undertaken by any cultivator without loss of status. In Ger many

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10 See also D. Lorimer, 1939, p.12.

11 Smiths are now concerned mainly with making and maintaining metal implements for agriculture - ploughshares, knives, sickles etc. - and with making the metal parts of water-mills. In the past they were also concerned with making weapons.
carpenters are Shins and Yeshkuns, and in Hunza a skilled carpenter is respected for his skill. There is a tendency towards the inheritance of the occupation, but only as a consequence of the facility for training for the son of a carpenter. Carpenters' major tasks are in the construction of new houses and the fashioning of farm implements. In almost every locality it was reported that carpenters are now paid at piece rates.

Of the traditional crafts milling perhaps contains a larger element of enterprise than any other. Only those on whose land there was a considerable fall in gradient could arrange a sufficient head of water, while the construction of the mill itself required a considerable investment. Hard stones suitable for grinding are found only in certain localities, and may have to be brought long distances: for example millstones for use in Gilgit were cut at Minapin, and it then required 8 men to roll each one along the tracks with the risk of fracture and falling. Setting the stones and the water-wheel, and making the adjustment mechanisms were tasks for skilled craftsmen, and there was the additional cost of constructing housing for the mechanism. (See photograph 23 opposite). Estimates of the current cost of constructing a mill fall between Rs. 500 and Rs. 1,000, depending upon the availability of suitable mill-stones and timber, and the necessity to build an aqueduct to produce a sufficient fall. The miller is paid pro rata by each individual according to the amount of grain he grinds. The normal rate throughout the region is 4 lbs. per maund, but in a few villages it was reported at 2 or 5 lbs. per maund. The rates appear to be customary and constant; there was no evidence of competition in rates. A mill that is efficient and working continuously can grind about 10 maunds of grain in 24 hours. A mill that grinds for 12 hours a day for 6 months would therefore

12 The method is illustrated by Conway, 1894, p.266.
13 The working parts of a mill are illustrated by Clark, 1957, p.232.
14 Typical construction costs in Gilgit are divided as follows: building of mill-house Rs. 2-300; wood and carpenter's charges for making and fitting the wooden parts Rs. 100-150; millstones Rs. 200-400. Stones in constant use are re-ground at intervals of about a month and replaced after 3-5 years, the lower stone needing replacement more frequently.

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yield the miller about 45 maunds of flour. Most millers appear to receive rather less than half this, probably because few mills operate regularly for more than the equivalent of 2 or 3 months, even though they may, where the water supply permits, grind continuously during certain seasons. At higher altitudes, much of the grain may have to be ground before the autumn slackening of the water supply. In other localities the mill tends to be operated at certain times of day, and each households' requirements are ground daily in small quantities. In such circumstances a miller can expect to cover his initial and maintenance costs after 3 years if his labour is free.

The occurrence of mills is limited by the necessity for a suitable fall of water, but only in a very few villages are there no mills at all. Where the topography and water supply are favourable, and where millstones can be readily obtained, there may be a number of mills, sometimes built one above the other in a steep watercourse. Since the high costs of transport limit the demand for the services of any one mill to local residents, such mills can be expected to show a slower rate of return, and in some localities they appear to be made largely for the domestic requirements of individual households. In 1916 there were 216 mills in Gilgit serving a population of about 16,000, i.e. approximately one mill for every 72 households. The number had apparently nearly doubled in the previous 2 or 3 decades, possibly as a result of the lifting of the tax that was imposed on mills under the former rule of the Pas of Gilgit. In Chitral the number of households served by one mill appears on average to be slightly larger, information was collected in 26 villages, only 3 of which, each with less than 25 houses, were without a mill. The average number of households per mill in the 26 villages was 15, but with a range from 50 to 5 households per mill.

16 One reason for this is that maize deteriorates after grinding.
Another craft with an element of entrepreneurship has been silversmithery. Silversmiths were among the Kashmiri craftsmen who were settled near Gilgit town and are present in small numbers only in that locality. Like the other Kashmiri craftsmen they probably originally served the Gilgit court, but their services were in occasional demand among the population of a larger area including Hunza and Shinaki for the making of silver jewellery. Silversmiths have their own capital, and are invariably paid on a piece-work basis. They probably rank highest among the alien craftsmen. 19

Also often rewarded on a piece-work basis has been weaving, the social status of which is generally intermediate among crafts. Weaving both wool and goat-hair is especially associated with Kamin and with Kashmiri; where they are absent, as in Kandia, Chitral and Hunza 20 it is undertaken by the cultivators of other groups. The preliminary preparing and spinning of wool is almost invariably a female task 21, has no social implication, and is performed in the sheep-owner's house. Teasing goat-hair is also a female task, but spinning it may be a male task. (See photograph 24 opposite). In Kandia and Gawri Kohistan women weave goat-hair and Kalash women weave wool (See photograph 27 opp. p.139) but elsewhere weaving is a male task, whether performed by craftsmen or cultivators themselves. 22 Goat hair is woven into rugs, ropes, socks and other articles. (See photograph 25 opposite).

Wool is woven into cloth on small portable looms in lengths of up to 17 yards, this being the length required for the traditional choga. (See photograph 26 opp. p.139). Rates of payment were reported at

19 As also in Swat: Barth, 1960, pp.138, 140.
20 D. Lorimer, 1939, p.9.
21 Described by E. Lorimer, 1939, pp.99-100.
22 Spinning, weaving, the making of clothes, the repair of farm implements and other non-seasonal activities are often performed in the winter months during the slack agricultural season. This period of inactivity, together with the accompanying snow which cuts villages at high altitudes off from all communications, must have further operated against the establishment of monopolies in non-agricultural tasks.
up to 5 annas per yard, depending upon the quality of the weaving. Weavers (and other craftsmen) who work at their clients' houses are also fed. The cloth is then made into clothing by members of the household; caps and chogas continue to be made, though often with the assistance of a tailor.

Another technique with wool is felting, to produce numbaha and horse coverings. This is characteristic of the Wakhi and of the Khashgari (see photograph 28 opp. p. 190), and is also performed in the south of Chitral by craftsmen from Dir who visit villages and offer their services on a piece-work basis.

Potters are found in some localities where the soil is suitable for their craft. They are likewise often kamins or Kashmiri and appear to rank above the Doms, Sonewals, Shoto and other smaller groups who provide minstrels, blacksmiths, leatherworkers and ferrymen. These, who are at the bottom of the social scale, have almost invariably been paid at a fixed annual rate.

In Shinaki and the Gilgit valley gold-washing is a low caste occupation, being associated with the Sonewals. In Shinaki they were allowed to wash the river sands and to occupy land in return for manning skin rafts for the use of the population in crossing the main rivers.23 (See photograph 32 opp. p. 196). Such rafts were operated on the Indus near Chilas village and Jalipur; the Sonewals are settled at Thalpen and Drung. In addition they receive small annual payments from the populations they serve - at Jalipur they receive 3 lbs. of grain from each household in Gor. Other rafts were formerly operated on the Astor, Hunza, and Gilgit rivers, and in Chitral. Some continue to be used, as at Silpi, where the raftsmen have been granted land and again receive a small grain payment from each household. Where they do not operate a raft, Sonewals may be taxed on their gold-washing, as in some of the Political Districts.24

23 Frontier and Overseas Expeditions, 1907, I, p.37.
24 Where Sonewals are absent, or where gold-washing is not regarded as a craft occupation, it has sometimes been local inhabitants' occupation for the state. It was the task of the inhabitants of Broz and neighbouring villages to wash river sand for gold for the Katore Mektars; others, probably of low social status, extracted minerals for the state: O'Grady, 1973, p.124. In Hunza it was similarly the task of certain people to wash for gold for the Nir: Schomberg, 1935, p.101.
There have been no 'sweepers' in Dardistan, nor groups whose special occupation is barber or dhobi. Circumcisions have been performed by Doms or some individuals of low status.

The Dependent Status of Craftsmen.

The specially low position of certain groups and occupations, together with the internal ranking between crafts, appears, like the presence of the system itself, to be largely dependent upon foreign ideas which have little 'rationality' in Dardistan. In Swat, craftsmen are additionally accorded a low social status by criteria appropriate there - e.g., their lack of political power and their economic dependence - and while these apply in Dardistan also, foreign and perhaps less appropriate ideas have been more important. Upon these foreign ideas the craftsmen have ultimately depended, both for the possession of their special associations with their craft occupations, and also for their incorporation in the states and communities of Dardistan.

Craft groups have thus acquired their economic 'niche' as a result of non-economic ideas derived from a foreign system, the economic component of which has often been incapable of full development in Dardistan. The small size of local populations and the traditional self-sufficiency at all levels prevented the development of a system of complete occupational specialization with reciprocal services between cultivators and non-cultivators. A further point of difference, both from the more elaborate system operating in Swat and from the Najmani system is that not all the contracts under which Dardistan craftsmen worked were freely made. According to information collected about some communities, e.g., Gor, there was an element of serfdom in the position of the Doms and Kamins, whose political status was perhaps more like that of the Bari craftsmen in Nuristan in the 19th century who were described by Bashgali informants as 'slaves'.

25 Of the position in Swat: Barth, 1960, p.139ff; also Barth, 1956a, p.26. Barbers who now carry on business in Gilgit bazaar are recent immigrants from Hazara, while those 'sweepers' who are now found in the region have been brought from elsewhere to serve the scouts' garrisons.

26 See also Robertson, 1896, p.99; Schomberg, 1958, p.195.
Probably in no part of Dar diam was the economic position of craftsmen as assured as it appears to have been in Swat, or as under the 'ideal' system of services exchange, for in Dar diam they could not rely on their crafts as a sole means of livelihood. In addition, their craft monopolies were not complete in many localities and they were nowhere indispensable so far as skill and technique were concerned. Craftsmen were among those liable to enslavement by the Katora and other rulers in the 19th century.

With the growth of a market economy and of the circulation of currency during the present century, there have been some changes in the organization of crafts and services. An increasing number are being practised on a piece-work basis, so that the activity of some craftsmen is more like that of shopkeepers - some have even opened shops in the bazars in order to pursue their crafts, e.g., the carpenters and silversmiths who now work in Gilgit bazaar.

With the import of manufactured goods some crafts are becoming less in demand, such as that of potter. Perhaps as a result of outside influence there has been a change in taste away from the adornment of women with jewellery, and there has been some decline in silversmithery. The decline in court life has resulted in less demand for musicians' services, although they continue to be employed for marriages and for special occasions and tournaments.

There has been a considerable breakdown in certain groups' associations with particular crafts. This is partly because some of the less specialized crafts such as weaving are being increasingly performed by farmers on their own account, while traditional tendencies towards monopoly in other crafts are being broken by the import of manufactured goods. In addition some of the higher-ranking craftsmen groups have increasingly tended towards agriculture, especially during the present century in Gilgit where they have been able to establish permanent unconditional rights to land and also, in some localities, to expand their holdings. In 1915 Thakur Singh observed that, with their acquisition of land, the Kamins were tending to associate themselves with farming rather than with socially-inferior crafts. 27

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27 Thakur Singh, 1917, p.47. See also Leitner, 1877, p.48; Jettmar, 1960a, p.122.
Apart from changes concerning particular crafts and groups, there has been a general decay of the older attitudes and conceptions and an increasing growth of the idea that to practise a craft is one of the ways in which additional income may be earned. Unlike Swat, there does not appear to be any evolution of new castes following the establishment of new occupations.28

The Exploitation of Non-Agricultural Resources.

Another range of traditional non-agricultural occupations have been concerned with exploiting the natural resources of the mountains and rivers. On the whole, and with the partial exception of gold-washing and mineral extraction, these activities have not had implications of inferior social status, though most of them have been practised by individuals of the lower classes.

Natural herbs and plants, wild game and fish provide additional sources of food. Barth mentions the collecting of mushrooms and bracken sprouts in Indus Kohistan,29 and in other districts cumin seed, edible pine nuts, blackberries, etc. are collected, mostly by shepherds. Most of such gathering is for domestic consumption, but there has been some trade in cumin seed.

A more special skill is required for hunting and bird-trapping. Hunting is popular as a sport and is now only occasionally a significant source of income, but in the past it was an important additional source of meat for some households. Perhaps more important have been the wild ducks that migrate northwards in the spring through the main north-south oriented valleys. During the migration season they have been trapped 'in hundreds' in some localities in Chitral.30 Although the number of duck making the annual migration is decreasing, they continue to be an occasional source of food in many parts of the region. In Chitral and in Bunza their down is woven into woollen cloth to give additional warmth to chogas.

28 Barth, 1960, p.137.
29 Barth, 1956a, p.23.
30 McNair, 1884, p.9.
Hawks were captured in the principalities for falconry and occasionally for export. 31 McMahon mentions that 60 goshawks were captured in the Katore territory in 1899 and that all female birds were presented to the Mehter, who either returned them or rewarded the captor. 32 In the principalities a skilled trapper, marksman or hunter was respected for this, and since he was likely to be brought to the notice of the ruler or a provincial governor, he might achieve social and economic advancement through his skill. The first man to offer a duck to the Katore Mehter during the spring migration was lavishly rewarded.

Fishing was not regarded as a sport, and in those localities where fish were caught and eaten they were considered solely as additional food.

Early accounts make it clear that some of the mineral deposits in the north of the region were occasionally worked, but mostly as an obligation to the state rather than as an individual enterprise. Mineral deposits were state-owned, and external political considerations appear to have had much to do with their intermittent exploitation, despite the fact that the export of, for example, lead and orpiment could yield a regular source of income for the Katore Mehtars. A number of observers recorded Aman-ul-Mulk's fear of invasion if the deposits were made to appear too rich. 33 The minerals that were being extracted under his rule at that time were orpiment from the Terich valley, gold from several rivers, iron from river sediment near Akburt, and a little lead.

Minerals were also extracted on a small scale in many parts of the region for cultivators' own purposes - lead for bullets, iron for metal-work and tilagit for its medical properties - but such operations were on a small scale and for local requirements only. 34

31 Biddulph, 1880, p.66; Cobbold, 1900, p.17.
32 McMahon, 1901, p.6.
33 Montgomery, 1872, pp.194-5; McNair, 1884, p.14; Lockhart and Woodthorpe, 1889, pp.266-7.
34 See also Vans Agnew, 1915, pp.301-2; Thakur Singh, 1917, p.60.
Timber was also cut in some principalities, notably the Katore where it was similarly a state monopoly and where, under Aman-ul-Mulk, Kaka Khel Pathan timber merchants exported several thousand rupees worth in some years.\(^\text{35}\) The wood — mainly cedar — was cut in the lower Chitral valley and its tributaries, and floated downstream through Afghan territory to the Kabul river and thence to Peshawar. The cutting and export was similarly intermittent, depending upon arrangements being made for the logs to be floated through Afghanistan. The necessity to make satisfactory arrangements for such transit has continued during the 20th century, and the export of timber from Chitral has continued to be intermittent.\(^\text{36}\) In the 19th century labour for timber-felling for the state was provided by local populations as part of their obligations; it did not at that time provide additional paid employment.

With the exception of Aman-ul-Mulk’s and other rulers,\(^\text{37}\) occasional state enterprises, exploitation of non-agricultural resources has nowhere proceeded on a large scale in the past, nor was it an alternative means of livelihood for cultivators. For a few, the extraction of minerals or the hunting of animals provided some additional income but, in relation to agriculture, such activities were insignificant.

During the 20th century, with the decay both of state and communal ownership of resources, and of associations between occupations and particular groups, there has been opportunity for individual enterprise, especially in gold-washing. In Gilgit and the Gilgit valley it is now sometimes practised by cultivators, though generally those with small holdings. The return is variable, averaging Rs. 2 - 3 per day, but occasional nuggets have been found, and in general gold-washing is reported to provide a considerable source of additional income for those who practise it on their own account.\(^\text{38}\) Similarly collecting

35 Lockhart and Woodthorpe, 1889, p.267.
37 Pakhtun Wali’s main source of revenue was the sale of timber in Darel and Tangir, the concessions for which were again given to Kaka Khel contractors: Stein, 1928, I, p.16.
silt is an individual activity and can add to incomes, but requires skill in climbing. In some localities the incrustations are so inaccessible that it is necessary to shoot them down.

On a larger scale, some minerals are again being extracted from mines, and timber is being cut in a number of districts. These however are new developments, belonging to the post-1947 phase of trading and contracting enterprise and of Government initiative, rather than to the traditional exploitation for state or local purposes.
CHAPTER 11

COMMUNICATIONS AND GOVERNMENT SERVICES

i. 1890 - 1947: the Establishment of Communications

ii. Pakistan's Administration: the Expansion of Communications

iii. Pakistan's Administration: the Development of Services

iv. Mobility and travel

The extreme relief of Baddistan and the physical obstacles to movement have been the cause of its isolation, and of the absence of regular and continuous contacts between its inhabitants and those of neighbouring regions. Internal communications have been equally difficult; the earliest writers commented upon the mutual isolation of districts and valleys 1, and others, more recently, have remarked on the difficulties of travel even within the territory of a single political unit, for example Chitral or Hunza 2. Not only neighbouring localities but adjacent villages might be cut off from each other for long periods — by snow in winter or by sheets of salt-water in summer.

The paths which did exist and were used, even the most frequented in the main valleys, were narrow, precipitous and barely passable to pack-animals, which repeatedly had to be unloaded 3. Where major rivers were crossed by jumla or raft there was no possibility of employing animals 4. (See photographs 31, 32, opposite.) Minor routes were more difficult still; many have been described in Government publications as 'passable to men and goats only'.

Thus almost any road-building and any improvements in bridging, however limited and for however short a distance, have contributed to the breakdown of isolation for some locality. Improved communications have been the first necessity for any dependable, sustained and efficient intercourse between Baddistan and the outside world. The impracticability of moving large numbers

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1 Biddulph, 1880, pp.1-2; Vera Agnew, 1915, p.304.
2 Stein, 1921, I, p.26; Schomberg, 1933, p.216.
3 Durand, 1900, p.46 ff, has described in some detail the state of the main track in the Gilgit valley as it was in the 1880's.
4 For the dangers of jumlas and for travel by raft, see Littledale, 1892, p.27; Curzon, 1923, pp.115-7, 141; Stein, 1928, I, p.15.
of personnel and of conveying large quantities of goods without first improving roads was demonstrated during the decades after 1860 when the Kashmir administrations and garrisons in Astor and Gilgit were being manned and supplied from Kashmir.

From Srinagar to Gilgit was over two hundred and thirty miles... of at best rough track, and closed by snow for half the year. The route crossed the Indus at Ranjil (at this time all goods and men had to be ferried across) and the forty-yard torrent of the Astor River at Ranjat.... In places the route was so narrow that miles often fell into the torrent below, and in others so bad that supplies could only be carried by impressed coolies.... Even in summer, when the heat was so pitiless that the route along waterless stretches could be followed by the bleached bones that littered it, communication between Kashmir and Gilgit was often interrupted. 5

Elsewhere in Puskistan, those states that remained independent between 1860 and 1890 continued to have no cause to improve their communications and accessibility, but may have had cause for not doing so, through fear of further Kashmir encroachments. 6 Although several of them paid nominal allegiance they were uniformly opposed to any threat to their de facto independence. 7

Thus despite the Kashmir presence in part of Puskistan for three decades, it was not until after the events at the end of the century that the first comprehensive attempts to improve communications were made.

1890 - 1967: The Establishment of Communications

In the 1890's came a number of events, the overall result of which was the establishment of an external supervision and influence in the administration of the lower part of the region. From the limited involvement of Kashmir in Gilgit and Astor, foreign suzerainty was extended to the whole of the Gilgit valley with its tributaries, including the Hunza valley, to the whole of Chitral, and to Chilas, Gor and several of the smaller Shinaki communities. The administrative pattern of the next half-century was firmly established, and at the same time many of the interregnum conflicts that had given rise to so much insecurity of life and property were resolved or abandoned.
Following these changes, immediate improvements began to be made in land communications to the south. In 1892, in place of the ferry, a suspension bridge was constructed across the Indus near Kunji, and similar bridges were completed over the Astore river. In 1893, a strengthened and graded 10° road suitable for pack-animals was completed between Srinagar and Gilgit town via the Surail pass. Another mule road was extended down the Indus valley from Kunji to Chilas village and thence via the Deobad pass and the Kaghan valley to Abbottabad, thus providing a second road into the region from the south, and one by which the distance from Gilgit town to a railroad was reduced to 230 miles. The third road into the region was constructed over the Lowarai pass after the pacification of the surrounding country in 1895. There was also a considerable extension and improvement of internal roads, and it became possible for pack-animals to proceed, without having to be unloaded, from Chitral town to Kastuj, from Gilgit town via Puniial to Cupia village and from Gilgit town to Baltit and Nagar village. However, it was only the major routes between the administrative and garrison centers that were improved; beyond the "roadheads" and on other routes, traffic continued by "rough tracks." The difficulties of road-making were formidable. In the valleys, roads were continually liable to landslips, rock-falls, and erosion by the rivers, while even the largest and strongest bridge might be destroyed by floods. At higher altitudes, as a traveler of this period observed:

One winter season with its avalanches and weather-beating almost sufficed to obliterate the roadway... stone-slides and earthslides from above, where the melting snows soliflux the soil, would leave no track did not the engineer year by year repair it.

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9 Administration Report of Jammu and Kashmir State for 1893-94, Calcutta, 1895, pp. 61-4; Frontier and Overseas Expeditions, 1907, p. 4. The road was built by a Government contracting firm who employed Pathan laborers—the labor and enterprise was not regional. The cost was Rs. 3,500 per mile (c. Rs. 20,000 at current prices).


11 Frontier and Overseas Expeditions, 1907, I, p. 4; Stein, 1928, I, p. 6.

12 Frontier and Overseas Expeditions, 1907, I, passim.

13 Frontier and Overseas Expeditions, 1907, I, p. 28; Census 1911, XXI, Part III, p. 527.

14 Note, 1913, p. 121; see also Schomburg, 1935, pp. 16-7; R. Lorimer, 1939, p. 60.

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Despite all improvements, the passes inevitably remained dangerous. Those between Srinagar and Gilgit were liable to

...sudden gales of deadly cold so intense that, even in 1932
when the route had been improved, a caravan of three hundred
miles and their drivers could be wiped out in a single night.\textsuperscript{15}

The blizzards and avalanches of the southern passes - especially the
Kamri, Burail, and the Lowari - have been a major hazard to communications
and have caused the loss of many lives.\textsuperscript{16} The danger from blizzards was
somewhat mitigated by the construction of shelters on piles \textsuperscript{17}, but fatal
accidents from spring avalanching on the Lowari route are reported every
two or three years.\textsuperscript{18}

The improvements to roads were nonetheless significant, especially
with the establishment of arrangements for maintaining and repairing them,
and with the appointment of Government officials responsible for this.

From this time the traditional northern links of Hunza with eastern
Turkestan, the westward links of Chitral with Beshistan, and the eastward
links of Gilgit and Astore with Baltistan declined. The improved southerly
communications were partly responsible for this, but political and admin-
istrative considerations were also relevant, not only in determining the
direction in which the newly incorporated territories should look, but also
in determining the extent of the new communications; thus the tracks north
of Saltir and in the north of Chitral were deliberately left unimproved\textsuperscript{19},
despite the anxiety among some official circles that trade with Turkestan
should be fostered.

Trade and other contacts with the south expanded slowly but steadily,
and opportunities for new non-agricultural employment began to increase.

\textsuperscript{15} Alder, 1963, p.133.
\textsuperscript{16} Durand, 1890, p.248; Stein, 1912, pp.24-5; Nowe, 1915, pp.24-5;
Schomburg, 1935, p.16.
\textsuperscript{17} E. Lorimer, 1939, p.53 and photograph 1 op. cit. p.10.
\textsuperscript{18} E.g. The Pakistan Times, 4th March, 1965.
\textsuperscript{19} Alder, 1963, p.90.
Such new activities brought many of the inhabitants of the region, directly or indirectly, into contact with new ideas and influences from outside. Currency and cash payment for labour were, in themselves, considerable innovations for the majority of cultivators.

Up to the end of the 19th century, very few inhabitants of the region had travelled beyond their home district. In 1877 a party of princes and Marquis of Chitral had been conducted to Delhi for the express purposes of acquainting them with the 'outside world' and of increasing upon them the scale of Government's resources. For similar reasons about fifty of the leading men of Dardistan were taken to Calcutta and elsewhere in 1902.

After the events of the 1890's there began some movement of individuals from the region to Kashmir and the Punjab in search of employment. Although the total numbers were very small, they often represented the more enterprising elements in local populations, whose influence in local affairs upon their return was correspondingly great. There was also an increase in the numbers making pilgrimages and going to the holy town, while the sons of men and of the aristocracy began to go for education to the public schools of Kashmir and British India. Altogether however the number of those who travelled 'down-country' remained very small. Even in 1931 it was officially reported that 'in the Gilgit Agency there is little more contact with the outside world now than there was formerly...' and for the great majority of regional inhabitants their nearest contacts with the outside world were at 'second-hand', from travellers and Government officials.

20 "A few Chitralis had been to Kashmir, a few as far as Cashmir, and still fewer had travelled a little in India..." 0. Burton, Chutney Vignettes in the Himalaya, London, 1910, p.253.
21 Alder, 1963, p.121.
22 Knight, 1895, p.287, records how, when they ... had passed baree, and looked down from the southernmost mountain-scare on the far-stretching, sunlit plains... the hillmen expressed their greatest astonishment... so immense a landscape as this was a revelation to them.
23 'Down-country' is a term used by inhabitants of the region for other parts of W. Pakistan south of the mountains, i.e. Rawalpindi, Peshawar, and all parts further south.
Nor did the improved communications necessarily result in new or stronger contacts between districts and their inhabitants. Lorimer remarked in 1927 that "Even now the various communities live to a considerable extent in a state of mutual isolation." 25

There do not appear to have been official attempts to interfere in social organization or agricultural activity, with the exception of the settlement of 1933. The policy of Government - and of the Kashmir administration, which was under Government supervision during this period from 1890 to 1947 - was one of non-interference. This extended even to the internal political and administrative arrangements of most of the communities of the region. Hunza, Nagar, Chitral, Punial, the Political Districts, and the achaupals communities managed their own internal affairs; Astor and Gilgit were more closely supervised and here the influence of Kashmir was stronger. Both districts were settled, and it was there that public services were first started.

In 1932-3 a primary school and a post office were opened in "Gilgit town and a primary school was opened at Astor village 26. Shortly after, medical dispensaries were established at Gilgit town, Astor village, Banji, and Chilas village, and subsequently hospitals for men and women were opened in Gilgit town 27. These arrangements were primarily to serve the garrisons and Kashmir administrative personnel, but from the start they were also available to local inhabitants 28, and medical services in particular reached the people of the northern valleys, as doctors and surgeons travelled between small hospitals in the major settlements and attended patients along the way 29. In 1940 another primary school was opened at Banji, and the Gilgit School curriculum was raised to "middle standard". By 1947 there were 165 boys at the Gilgit middle school, of whom 98 were inhabitants of Astor and Gilgit.

26 Administration Report for 1932-23, p.3; Thukur Singh, 1917, p.16.
27 Administration Report for 1931-24, p.45; Stein, 1903, p.27.
29 Thukur Singh, 1917, p.16; see also Schoenberg, 1955, pp. 39, 90, 95; Longstaff, 1950, p.925.
45 came from Hunza, Nagar, Burial and the Political Districts, and 72 were outsiders.\(^{30}\)

Medical facilities were available in Chitral from the beginning of the century, but education there was later in being started. The first school was opened in 1931.\(^{31}\) Even in the Gilgit Agency education was limited to the sons of the upper classes of the principalities. It has been only in the period since 1947 that education has begun to reach the middle and lower classes of the principalities, while in the asephalous communities the process has been started from the beginning since 1947.

Towards the end of the pre-partition period there were further developments in communications. The road between Ashrat and Chitral was widened to accommodate motor vehicles, and from the 1920's was being used by cars and lorries which were manhandled across the Lowarai pass in pieces and re-assembled.\(^{32}\) It then became possible to motor from Rawalpindi or Peshawar to Dir, cross the Lowarai pass on foot or horseback, and motor from Ashrat or Kirthani to Chitral town. The journey from Dir could be completed in one day.\(^{33}\) The road from Chitral via Wastuj was also extended, and by the 1930's it had been graded so that it was possible for motor cycles to be used between Chitral town and Sar Laspur.\(^{34}\) Later the road between Dir and Ashrat was improved, and in 1947 the first jeep was driven across the Lowarai pass.\(^{35}\) An airfield was built at Gilgit and used by the air force from 1934,\(^{36}\) and landing grounds were also constructed at Chilas and Dusha,\(^{37}\) but during the pre-partition period air communications were used for administrative purposes only.

\(^{30}\) Chulaur Singh, 1947, p.16.

\(^{31}\) Israr-ud-Din, 1965, p.45.


\(^{33}\) Bright, 1939, pp.311-2.

\(^{34}\) Power, 1948, p.70.


\(^{36}\) Mason, 1955, p.217.

\(^{37}\) Veryard and Ray, 1934, passing; Power, 1948, pp.69, 77.
During all this period, from the 1890's to 1947, the Kohistan and Shinaki communities with the partial exception of Chilas, remained unaffected. The only road to have been built within that part of the region was for the Babusar route, via Chilas Village and the Indus valley.

An official gazetteer of 1928 described Darel and Tangir as being largely 'terra incognita', and the only traveller and writer to make an extensive journey in these valleys during this period was Stein. Indus Kohistan remained even more remote, and it was not until the annexation by Swat that the first scientists and scholars entered that district. Gawri Kohistan became accessible from Swat during the 1930's after the incorporation of the Tarvall into Swat, but it was not subject to external influences at that time and was not placed under a superior administration until shortly after Partition.

Pakistan's Administration: the Expansion of Communications

A few days before Partition Gilgit was handed back to the Maharaja, thereupon the Gilgitis quietly staged their own peaceful revolt without assistance. And then invited the intervention of Pakistan. Thus it was that Pakistan acquired the great mountainous wastes of northern Kashmir.

Chitral and Swat acceded to Pakistan at Partition, and so all parts of the region (except, technically, Tangir and Darel) immediately became integral parts of Pakistan. This marked the beginning of the most recent phase in the development of the region's contacts with the outside world, during which the rate of growth of contacts has accelerated, despite some inevitable initial setbacks.

38 See Stein, 1928, I, pp.1ff. The mutual hostility of the Agency administration and Darel and Tangir is mentioned by Longstaff, 1950, p.49ff. Darel and Tangir remained independent until after Partition.

39 Since Partition there has been a tendency for Gawri and Kardisala, like the inhabitants of the northern valleys, to turn to the south. The reasons are probably similar - improved southerly communications and the location to the south of administrative and commercial centres in the lower Swat valley.

For the Gilgit Agency the first and major result of the fighting in
Kashmir in 1947-8 was the cutting of the main lines of communication with
Srinagar, which have remained cut by the cease-fire on the southern side
of the Parnull pass, as a result

...until a jeep track, usable only for a few weeks in summer,
was built some years later from the Khaghan valley... Pakistan's sole means of administering this past, thinly
populated region was by aircraft and wireless.

Soon after Partition a regular air service between Rawalpindi and Gilgit
was established. The route over the Babusar pass was made suitable for
jeeps in 1952 and has remained the only land route by which vehicles can
reach the agency, but owing to its difficulty and the short season during
which it is open (mid-July to October), there has been increasing dependence
upon the air link as the major means of communication. At present, in a
single day, weather conditions permitting, there may be up to four sorties
from Rawalpindi each of two or three aircraft. A scheduled service can be
maintained because of the unpredictability of weather conditions, which have
to be perfect before a flight can be attempted. Several days may pass without
flights and afternoon sorties may be cancelled because of increasing
cold at that time of day. Nonetheless the total number of flights per
year and the total annual load-carrying capacity is considerable. The
aircraft in operation are mostly Dakotas.

Since Partition roads within the Agency have gradually been extended,
widened and re-graded for use by jeeps. The difficulties of constructing and
maintaining such improved roads are correspondingly greater, and
difficulties and interruptions on journey are unavoidable. (See photographs
33,34,35 opposite). Nonetheless there are now jeep-roads from Gilgit town
to Pasa in Hind, to Nayar village, to Batti in Astor (and possibly beyond),
to the Marshar pass via the Gilgit valley, with branches to both Yasin and
Isliman, to Chila village along the Indus valley, and thence to Torban
and beyond, and via Hambur to the Khaghan valley.

43 Data are not available.
44 There are also proposed extensions of jeep-roads along the Indus to
Rawalpindi and from Astor via the Plains of Doseai; no precise
information about these roads is available.

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In Chitral, the road mileages have also been expanded, in Chitral by a factor of five since 1953 according to Israr-ud-Din. Buses and lorries continue to be manhandled across the Timari pass, but since 1967 the pass has been open to jeeps and light traffic each summer between mid-July and November or December. North of Chitral town the motor road has been extended for jeeps up to Arandu, although this section has not been kept in continuous repair. There are also jeep roads leading from the Ahsent-Chitral section to Arandu, to Dailu, and to Sayun. In the winter of 1964-5 another road to Ishan was being completed, and construction for another in the Shishik valley had begun. In Garmi Kohistan a road from Baramal to Itan suitable for cars and light lorries was completed about 1957, and has since been extended to both Jashu and Utrot. The road to Jashu is at present being extended to Pulaga. The southern part of Kohistan is now linked to Swat by the new Kohistan valley road, but this is not yet in general operation, and construction had not reached the mouth of the Kandia valley in the winter of 1964-5. The extent of jeep-roads in the region in the winter of 1964-5 is shown on map 8 (opposite); their total length at that time was about 600 miles.

In 1962 P.I.A. introduced a twice-weekly passenger service by air from Peshawar to Chitral town which has been extensively used by visitors and by local inhabitants.

Although many of the roads, like the rail-tracks before them, were probably constructed primarily for military and administrative purposes, the traffic which they have borne has had a considerable effect in extending the horizons of those villages situated along the roads. This process has come about not only with the utilization of jeeps and with wider travel by local inhabitants, but also with the increase in the number of services and institutions that are now administered by means of jeeps — schools, dispensaries, agriculture, forest and fishing projects, military outposts, road works, tourism, royalties etc. In the construction of the roads of Swat Kohistan and Chitral, economic considerations have also played a part, especially where national economic policies have been concerned — for example.

the road to Madaglaht will facilitate the exploitation of the timber of the Shadi valley, while the road to Garul was made in connection with Pakistan’s tourist trade. Garul Kohistan especially has been visited by large numbers of tourists, student groups, research organizations etc. Kandia and the districts of upper Chitral remain physically isolated, although education and other services are present.

The telephones, radio-telephones and telegraphic services have been in operation all over the region for a number of years, but they continue to be used only for administrative purposes. Broadcasts by Radio Pakistan in the Shina and Khawar languages are received in the region, although the number of radio receivers is small.

The post-partition developments in communications together with political integration with other parts of Pakistan, have given a new impetus to the process of re-orientation towards the south. This was further accelerated by the closing of the region’s borders with Afghanistan and Turkestan in the 1950’s. The southerly links are especially apparent in the principalities; the acciparous communities continue in some respects to form an ‘island’ of conservatism and non-participation.

Pakistan’s Administration: the Development of Services

The development of health services has continued since 1947, although qualified doctors are few in number 47; they are based at the hospitals which are now located in Gilgit town, Chilas and Sadia villages, Chitral town and Broach. Growth in health facilities since 1947 has come in the form of dispensaries which are now located in all major villages, each manned by a dispenser trained to treat common illnesses and injuries. To what extent improvements in health have contributed to the growth of population is not known, but the spread of dispensaries appears to have done much to associate, in local thought, the welfare of the region’s population with the Government of Pakistan.

Agricultural services are largely experimental. No evidence was collected that suggested that they have made any impact on agricultural practices. Some new varieties of seed have been introduced, but without much success and their use is limited to the localities near Gilgit and Chitral towns 49. A number of fruit-trees have also been distributed in Chitral, but since the region is self-sufficient in fruit-production, and since possibilities for the export of fresh fruit are strictly limited by its perishable nature and by the uncertainties of daily weather conditions and hence of air transport, this also has had little effect. Veterinary services have also been started but, except at Gilgit, are still embryonic.

The forestry service is concerned with preservation measures in the south of the region and with experimental plots elsewhere. All these services are handicapped by lack of resources and trained staff; and a few early attempts to introduce inappropriate 'down-country' techniques and materials have added to the caution with which agricultural innovations are received in the region.

Of the services expanded since Partition, education can be expected to make the greatest impact in the future and to be one of the major influences for change. As yet its influence is only beginning to be felt: of 42 farmers of the principalities who had male children or grandchildren at the time of interview, only 4 had themselves received some form of secular education, but 36 reported that their sons or grandsons were attending or, if young, would attend school. School for boys are in greater number but, at least in the principalities, there is demand for girls' education, and schools for them are being opened in the main villages. Many of the teachers in the region are not regional inhabitants, but exclusively from the principalities.

In the Gilgit Agency in 1964 there were three high schools (two at Gilgit town, one girls' and one boys', and one at Astor village), six middle schools, and nearly 100 primary schools. The majority are financed through

43 Cultivators who had used newly-introduced seeds reported that for a year or two they gave improved yields, but that crops then deteriorated. Lambton, 1953, p.36, reports the same experience in Iran. See also Larar-us-Sin, 1965, p.173.

the Agency administration and Government, but some schools in Kaniwal localities - as in Chitral also - are financed by T.M. The Ana Khan. In the winter of 1962-3 there were estimated to be about 50 students studying down-country in colleges and universities, but other data for higher education are not available.

In Chitral in 1961 there were three high schools with 814 pupils, 20 middle and lower-middle schools with 2,542 pupils, and 68 primary schools with 1,565 pupils. At that time 97 students had graduated or were following courses of study at universities and colleges. The majority of these have returned to take up posts in the administration or to join the new educational and health services.

While education has been accepted and welcomed in the principalities of the Gilgit Agency and among the Kho of Chitral, it appears to be less favored among the Kaniwal, the Gwari-Bati, the Gujars, the Bashgali and the Kalash, although, in Chitral at least, educational opportunities have been equal for these groups. Gujars throughout the region, on reason of the greater degree of pastoralism and their general conservatism, have had little contact with the new schools. This is also reported among the Shinaki and Kohistan communities, and although education for boys is beginning to be sought in some localities, the process is occurring more than a generation later than in the principalities. The slower spread of education through the acahuals and most of southern Chitral communities is illustrated by the fact that the teachers there are either inhabitants of the principalities or are outsiders.

While consequences of such of the recent expansion in education can be expected in the future, the Village Agricultural and Industrial Development (Village AID) programme has had a more immediate effect, especially in the Gilgit Agency. Although the programme was superseded elsewhere in Pakistan in 1959-60 with the introduction of Basic Democracies, it continued in the Gilgit Agency up until September 1964, and was thus observed in operation.


51 Ishaq-ul-Din, 1965, p. 73. The Kalash favour education in general, and successfully petitioned for a primary school in Ramhor, but there is a particular difficulty in their fear that education may be injurious to their religious beliefs.
Its functions have since been assumed by other departments, and by the newly introduced Basic Democracies. Apart from the large number of schools, dispensaries, irrigation channels, bridges etc., which have been built, mostly on a 'self-help' basis, the Village AID programme has introduced new ideas and influences in the significant form of Government activity into most villages, irrespective of their accessibility. Discussion in many villages confirmed that the conception of Government responsibility for aspects of local welfare had become established.

It was observed in a number of villages, particularly in villages and parts of Chitral, that there were strong expectations of Government initiative and finance in any scheme to extend the cultivated area or to enlarge an existing irrigation channel. Whether or not it was being small, such schemes would have been undertaken in the past without some additional initiative is not known. Certainly in the past the state governments and jirgas would have been concerned, and in a few instances rulers and state administrations did take the initiative and provide the finance for channel-building, though usually only where the operation was beyond the resources of a village or local population. A similar condition applied to the assistance given by the Khaibar administration for extension in Astor and Gilgit.52

Some current irrigation schemes are undoubtedly too elaborate and costly for local populations unsuited - for example, the channels 10 and 15 miles long mentioned by Lsar-ud-Din53 - but that writer is nonetheless of the opinion that some of the smaller projects could have been undertaken without Government assistance.54 As the extension of irrigation approaches the technological limit,55 specific projects will become increasingly difficult and Government assistance increasingly necessary.

52 Chakar Singh, 1917, p.35 ff.
53 Lsar-ud-Din, 1968, p.166.
54 Lsar-ud-Din, 1968, p.176.
55 The results of channel-building by the Public Works Department suggest that local techniques in channel-building have not been bettered. Greater success has been achieved by Village AID in providing some part of the necessary materials, and cash for paid labour, and allowing local inhabitants to organize and execute the work themselves.
Availability and Travel.

Although they facilitate physical movement and lessen the risks attached to travel and transport, the new roads and means of conveyance do not appear to have reduced the costs of moving goods. They have however made it practicable to transport bulky loads, including grain, from one district to another and they enable goods to be imported from distant country and carried to most major settlements with a greatly reduced risk of loss, damage and delay. Past and present costs of transport can be roughly compared by considering the charge per mound or per load over a certain distance 56, but this does not take into account the savings of time that are now possible. The journey from Srinagar to Gilgit town formerly represented about 2 weeks' march 57, even from Astor village it might take a week to reach Gilgit 58. The journey by air from Dewalpindi to Gilgit town takes less than 1 hour; that from Peshawar to Chitral town takes about 45 minutes. The journey from Gilgit town to Duple by jeep takes about 6 hours; previously it was reckoned at 2 or 3 days on horseback, and that only after the tracks had been greatly improved. 59

56 A detailed comparison of transport costs in the pre-Partition period and at the present time is not possible since there are no data for 'market' costs for the past. Much of the conveying was formerly performed as an obligation to a state or the Kashmir administration, or was paid at a rate fixed by Government. In 1915 the official rate for a horse (and driver) was 1 anna per mile for a load of 25 annas; Thakur Singh, 1917, p. 53. In 1937 the 'market' rate appears to have been about 2 annas per mile; Farid Khan, 'Sethukistan Zwischen den Grossmoglichen', Königsberg, 1937, p. 99. The current rate is 4-5 annas per mile, but varies with the season (especially with snow-fall); the condition of the road (which itself may vary from month to month), the availability of labour and of alternative transport, the opportunities for a return load etc. Between the main settlements there are roughly standardised charges, e.g. Duple to Gilgit Rs. 1 (per mound); Chilas to Gilgit Rs. 7-8; Chitral town to Mastuj Rs. 6-8; Baltit to Gilgit Rs. 12. The latter rate reflects the generally more difficult and dangerous roads of the River valley. Rates in the Gilgit Agency are generally higher than in Chitral and over the Kohistan owing to the higher cost of importing petrol from distant country. Rates for jeepable journeys appear to be determined by the jeeps; pack-animals do not appear to compete with jeeps and the rates per mound are roughly the same for both forms of transport.

57 Alder, 1943, p. 133.
58 Knight, 1935, p. 299.
59 Longstaff, 1950, p. 196.
One consequence of the saving in time is that the increasing numbers of regional inhabitants who travel down-country in the winter months for employment are able to add a month or more onto the period that they have available. In this additional month they can often earn a net sum sufficient to offset a large part of their total travel expenses. This in itself has been an encouragement to increased mobility.

Communications and services have been brought to the region from without. Equally important in bringing outside influences to many villages has been the post-partition movement among younger inhabitants of the principalities who travel down-country in search of employment, sometimes for two or three years, but more often for the winter months only, while they are not required for agriculture. In the earlier part of the 20th century, travel beyond the village or locality was uncommon among cultivators, except where they were required to visit the capital or provincial centre to attend the ruler or for state duties. Similarly at present, certain individuals — Lashkara, Basic Democrats etc. — visit the appropriate administrative centre for Government and administrative purposes, but those concerned are few, and it is more common to find that heads of households, representing the older generation, have not travelled far afield. This is illustrated by data collected from random samples of cultivators in 7 villages. Of 63 individual heads of households, whose average age calculated from their own statements was 47, only 7 had travelled beyond Baltistan and the adjoining mountain regions, i.e. Baltistan and Muristan. 33 had not travelled further from their village than the nearest administrative centre — Gilgit town, Chilas village, Chitral town or Peshawar.

It has been those younger members of the region’s population who have travelled outside the region who have been most exposed to the influence of new ideas, and among whom the possibility of satisfying new wants has become most firmly accepted. That these individuals are inhabitants of the principalities again emphasizes the differences in organization and economic

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69 Air fares for regional inhabitants are at concessional rates: for a single journey between Chitral and Peshawar, Rs.36; and for a single journey from Gilgit to Rawalpindi, Rs.40. Equivalent fares by jeep and lorry are Rs.20-25 and about Rs.30, to which have to be added costs of food etc. on the way.
activity between the principalities and the accephalous communities. The
development of an exchange economy, which has been proceeding in the prin-
cipalities since the beginning of the century, is at a much earlier stage
in most of the accephalous communities.
 Trade in the 19th century.

The main routes by which the ancient and celebrated trade of Central Asia was conducted lay outside the region, but offshoots used to reach the principalities. A small volume of goods came to Chitral from the north and east, and a smaller volume passed through Gilgit. In the early 19th century traders brought the precious wares of Central Asia, for which there was a market in the principalities. Prices were high, much of the cost representing the difficulties and dangers of transport on the perilous mountain paths. In the eastern part of Dardistan journeys involved risks for caravans that were of the same order as those documented for the Karakoram pass-Ladakh route, where between 20% and 40% of pack-animals were lost on each journey, and occasionally 60%. In Chitral the difficulties of the northern routes were rather less great, and there was also more grazing available for pack-animals.

To the physical and logistic difficulties were added the risks of attack and looting, particularly by Runzalute along the northern side of Karakoram watershed, and by Bashgali and Chilesia in the south-west and south of the region. A traveller in the Khorat territory in 1870 described how the Bashgali 'infested' the Leitarai and Dorah passes and how, although the traders travelled in parties—sometimes as many as 200 men—they were frequently attacked and many of them killed. Similarly in the south-east the raids from Chiles prevented the use of

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1 This was recorded as early as the 1820's; Moorcroft and Trebeck, 1841, p.270.
2 Alder, 1063, pp.22-3.
3 Stein, Tracts, I, p.75 and n.
4 Montgomerie, 1872, p.193. See also Munphilhoor Mom阶梯, 1869, p.132; MoNair, 1884, p.77ff.
the Shabamar route and were a constant risk on the Pusul route, while
disturbances and feuds prevented regular traffic via the Indus valley. The "stunting" of trade by Hunza raids on the Turkestan-Ladakh caravans became a minor preoccupation of Government in the second half of the century, and their suppression was one of the objects of the Hunza campaign of 1891. Added to the high risks of attack at the periphery of the region were the internal uncertainties resulting from the turbulence and warfare in the Gilgit valley during much of the 19th century. Only after 1860 was there a chance for regular traffic to operate in the Gilgit valley, and this only via Astor and the Pusul route, the physical difficulties of which have been mentioned above. (See p. 197.)

The purchasers of costly goods were the rulers and princes, and members of the upper classes of the principalities, the majority of whom financed their purchases, directly or indirectly, from agricultural surpluses. The goods given in exchange were also of a relatively high value in relation to bulk—gold dust, minerals, woollen cloth and woollen goods, goat hair, dried fruit, almonds, apricot kernels, clarified butter, and falcons. The trade was mostly in the form of barter; there were no local currencies, although gold-dust was occasionally used. Gold and silver coins of neighbouring countries were acceptable, but there were few in the region and most of these were in the possession of the rulers.

Much of the trade was centred about the rulers themselves, who required goods for distribution among their followers and state officials and who exported in exchange similar agricultural products, and sometimes minerals, slaves, and loot from raids on caravans.

5 Biddulph, 1880, p. 3.
7 Lockhart and Woodthorpe, 1889, p. 262. When coin was obtained, it was often melted down for jewellery.
8 "The king himself is the chief merchant in the place..." viz. the Katora territory. "The Mullah's Journey from Jelalabad to Barhaddi-Wakhan by the Baroghil Pass", Report on the Trans-Himalayan Explorations, etc., Calcutta, 1876, p. 32; (for full title see bibliography).
9 "Two or three hundred slaves are sent annually into Turkestan... and constitute one of the chief exports from the [Katora] country." Raverty, 1864, p. 133. See also above, p. 71 and n.
The early 19th century caravan trade of the principalities was mostly directed northwards and westwards out of the region. With the south there was also some small-scale trade conducted by itinerant peddlars from outside the region who, with salt and cheap manufactures, 'penetrated the remotest glens'. Vigne mentions that peddlars from Peshawar visited the Shinaki communities with 'coarse cotton-cloths, and raw iron'. Nonetheless, so far as all but the upper classes of the principalities were concerned, local self-sufficiency is a more appropriate conception for the early 19th century. Even salt, essential for health in all diets, was often obtained locally by leaching the soil.

During the 30 years following 1850, when the Kashmir position in Gilgit was firmly established and the route through Astore was secure, Gilgit's southerly trade began to expand. Permanent shops were opened in Astore village and Gilgit town by Kashmiri who carried on business with the increasingly accessible markets of Kashmir and British-India. In Chitral during the same period the first rule of Aman-ul-Kulk and his increasing influence over the Pathan allowed some development of trade with Peshawar and the Pathan regions south of Chitral.

There was not only a change in the direction of the trade but also, and increasingly, a change in its composition towards mass-produced items and consumables. In 1869 Munphool reported that merchants from the north and west were bringing horses, silks, cloaks of Russian broadcloth, salt, cotton cloth and iron pots in exchange for slaves and Chitral woollen goods; at the same time traders from Peshawar were bringing cotton piece-goods, cheap manufactures, iron and salt to barter for orpiment, woollen goods and falcons. Manufactured and mass-produce goods became increasingly characteristic of the southerly trade.

10 See also Ahmad Ali Khan, 1884, p.4.

11 Vignes, 1844, II, p.300. Several of the 19th century writers mention peddlars from Koli, an acquealous community to the south of the region studied, but no recent information about them is available. It is likely that as permanent shops have become established in the region, so their business has declined.

12 Munphool Meer Meonahar, 1869, p.133.
As the rulers' personal monopolies in trade declined, and as trade became increasingly centered about the bazaars, there was a tendency for the rulers and governors to impose levies on goods passing through their districts. By the time of the 1883-6 mission, levies on trade described as 'numerous and vexatious' were one of the chief sources of revenue for the Katora administration. The Kashmir authorities were similarly reported to be taxing goods in transit to the Gilgit valley, while the rulers of Punial, Hunza and Nagar were taxing goods entering their states. While this may have temporarily deterred merchants, the political changes of the 1890's and the subsequent improvements in the roads further and firmly encouraged the southerly trade. Taxes were standardized and arbitrary exactions abolished. Durand observed how business was increasing under the new administration.

The Establishment of the Trade in Consumers' Goods.

The purchasers of the increasing flow of manufactured and consumable goods were initially the outsiders stationed or living in the region and the wealthier upper classes of the principalities. Besides being the traditional leaders of opinion and innovation, the members of the upper classes were already accustomed to the idea of trade and were able to afford imported goods. The consumption of tea, the use of crockery and the wearing of cotton clothes became

14 Marsh, 1876, p.138.
15 Administration Report of The Kashmir State for 1891-92, Calcutta, 1892, p.72. Goods entering and leaving Chitral have continued to be lightly taxed and so contribute to the state's income. Typical rates are: cotton cloth Rs.2 per 500 yards; tea Rs.3 per maund; goat hair Rs.12 per maund. Since the 1890's much taxe do not appear to have influenced the development of trade.
16 Durand, 1900, p.13.
17 Their numbers were considerable, especially at the end of the 19th century and early part of the 20th. In 1880 the Kashmir garrisons totalled 5,000; Alder, 1963, p.160. After the 1890's there were several hundred troops at both Gilgit town and Dushak, and others at Chilas village, Bunji, Gupis and Chitral town: Frontier and Overseas Expeditions, 1907, I, pp.4-5; O'Grady, 1913, p.179; Longstaff, 1950, p.195.
symbols of high social status — an extension of the traditional
social advantages accruing to those who displayed costly possessions
and luxuries. Other imported goods that were sold in the growing
bazaars were metal utensils and implements, sugar, soap, salt, spices,
oil, cigarettes and matches.

As the 20th century advanced, demand for the new goods began to
spread to the middle classes of the principalities — the Yaft and their
equivalents — who owned ancestral land, who cultivated themselves, and
who had some agricultural surplus over day-to-day consumption. The
expansion of demand was facilitated by the relative social flexibility
of the principalities and the increasing contact of their populations
with the outside world. On the supply side it was facilitated by the
spread of shops to other centres in the principalities and by the
consequent possibility of bartering surplus agricultural produce,
especially grain, for imported goods. Itinerant dealers had been
unwilling to accept grain in barter but permanent shop premises with
stores, together with improved roads, made it feasible for traders to
accept grains and other bulky agricultural products. These were both
for their own consumption, and for storage and eventual transport to
neighbouring localities, although in districts where there was a
consistent and widespread surplus of grain there was a limit to this
latter possibility. Nonetheless the majority of the population had
to make considerable journeys to reach the nearest bazaar. Internal
travel and transport continued to be on foot or by animal, and although
easier on the wider and graded roads, remained arduous and time-
consuming. Transport costs continued to add considerably, and often

18 See also Thakur Singh, 1917, p.15; Census 1941, XXII, Part III,
p.521; Power 1948, p.68. The consumption of tea is now taken
in the region as an indicator of the establishment of new tastes.
Although tea was recorded as being an occasional import into Chitral
in the 1820's, it was very rarely consumed before 1890: Moorcroft

19 In Astor and Gilgit it may have been further assisted by compulsory
purchases of agricultural produce by the Commissariat Department:
Thakur Singh, 1917, pp.82, 160-1. In general however taxes were
levied in kind and did not lead to the circulation of exchange media

20 Thakur Singh, 1917, p.82.

21 Schomberg, 1935, p.66 gives an instance.
prohibitively, to the prices of imported goods in the more remote localities.

There were many constraints on the spread of a new pattern of consumption. The idea of exchanging agricultural products for other goods was new, and was contrary to the ethos of the middle and lower classes: in the past even the upper classes had exchanged surplus produce only for value-retaining assets, and not for consumable goods, while the less wealthy had accumulated any surplus over day-to-day consumption and kept this for festivals, ceremonies and hospitality. There had been local barter transactions in agricultural products between cultivators’ households and between neighbouring villages, but the commodities were familiar and locally produced, and there was no net loss to the locality in staple foodstuffs, whereas the exchange of agricultural produce for imported goods resulted in less being available for hospitable obligations. Tea, when introduced into a household, has often been reserved for guests and for special occasions, thus providing a socially-acceptable equivalent for the highest-quality local produce that was previously reserved for guests.

Feelings of 'shame' have been attached to the sale of any agricultural produce to outsiders, and in many villages the sale of fruit under any circumstances continues to be 'shameful'. Many individual informants stated that such considerations continue to influence them, although they are aware that they cannot now rationalize this. A generally greater degree of reprehension is attached to the sale of produce in order to afford consumable goods, whereas sales that are to be used to finance an enterprise (the purchase of land or animals, or a son’s education) or that are necessitated by misfortune (illness or the loss of a crop by disease, and especially where the individual concerned has few resources) are generally regarded as being more acceptable.

22 This may derive from the traditional custom of allowing travellers, passers-by, neighbours and servants to have free access to orchards and to eat fruit without restriction, irrespective of the ownership of the trees. It was 'a churl' who fenced his fruit trees: Lockhart and Woodthorpe, 1889, p.266. The preservation of fruit for male conflicts with this convention.
Such constraints have been stronger among the achenalos communities and the minority groups of the south of Chitral - bunderik, Bashigali, and Kalash - for whom the hoarding and periodic consumption of all surplus produce, however large the surplus over day-to-day requirements, has been essential social practice for all farmers. Unlike the principalities, no social advantages were attached to the ownership of imported goods, but rather the reverse. In Gor the jirga continues to exercise a control over any proposal to dispose of agricultural produce outside the community, and there were probably similar measures in other achenalos communities which were designed to protect their self-sufficiency.

So far as the supply of goods was concerned, the continued independence of Kohistan, Dareal and Tangir, the general absence of law and order throughout Shinak, the xenophobia, and the lack of improved roads were strong disincentives to traders and shopkeepers for several decades after 1900. At the present time almost all outsiders, including itinerant traders, continue to be excluded from the inhabited areas in Dareal and Gor.

As the 20th century advanced, the Turkistan and Badakshan trade became progressively less important than the southerly trade in manufactured goods. Demand for the durable luxuries was falling throughout Central Asia, as wealth was being put to alternative uses, and new ideas about saving and investment were gaining ground. The need among the princes and aristocracies for liquid assets was decreasing partly because of the wider acceptance and circulation of currency.

The trade of Badakshan and Turkistan itself changed somewhat in composition, and some utilitarian and consumable items continued to be

23 That this state of affairs tended to be self-perpetuating was recognized by Pakhtun Walli, whose first objective was to build roads and encourage trade and outside influences. Jettmar, 1960a, p.132.
imported into the principalities, e.g. iron cooking pots, salt, felts, and also horses and carpets. Trade in such goods between Gilgit and Eastern Turkestan continued sporadically until the 1950's, but ceased with the closing of the Turkestan border. A small but intermittent trade between Chitral and Badakhshan still continues, depending upon current regulations over the closing and opening of the border. It was reported in Chitral that clarified butter, felts, goat-hair and cumin seed are brought from Afghanistan and traded in Chitral bazaar for domestic cotton cloth and tea, and Chitral-made woollen caps. Since Afghan nationals do not normally go beyond Chitral town, the bazaar traders are involved in this small entrepot trade.

24 Thakur Singh, 1917, p.53; Morgenstierne, 1932, p.32; Scott, 1937, p.2; Tilman, 1949, p.50; Peter Goodwin, "Gilgit Bazaar", Geographical Magazine, XXIII, No.9, (Jan. 1951), p.400 and supplement. There also developed after the 1890's, and especially in the 1920's and 1930's, a small through trade between British-India and Eastern Turkestan, but the absence of improved communications north of Baltit and Panja, together with other difficulties, prevented these routes (or indeed the total volume of this trade) from ever becoming as important as had once been hoped. See Alder, 1963, p.90. In 1951, 29% of the total value of British-India's eastern Turkestan trade (i.e. about Rs.380,000 worth; at current prices = Rs. 2 million) passed through Chitral, and 40% through Hunza, but the remaining two-thirds continued to be carried on the traditional route via Ladakh; Kasag, 1937, pp.28-9, 153. This through trade was of small significance to the inhabitants of the region, and by the end of the 1940's it had further declined. See also Scott, 1937, p.8.


26 If, as has been suggested, the border is re-opened to allow Turkestan traders as far as Gilgit town, then some entrepot trade may develop there also. See The Observer, 13th July, 1964; The Times, 13th May, 1966.
Population Growth and the Break-down of Self-sufficiency.

During the early decades of the 20th century another factor was also becoming increasingly important. At the same time as new ideas and new demands were beginning to spread through the middle classes and to the lower and less wealthy classes of the principalities, many local populations were beginning to outstrip the extension of their cultivation. The failure of agricultural production to keep pace with the growth of population has tended—probably more than any other single factor—to bring cultivators into contact with a market economy.

At first the deficiencies had some limiting effect upon the spread and acceptance of new ideas and goods, especially among the lower and poorer classes, for the growth of population progressively absorbed small exchangeable surplus over day-to-day consumption. Informants suggested that in some districts there was a deterioration in the economic position of the lower classes. In the 1930's, Lorimer reported that although downcountry salt was available in Gilgit town bazaar few Hunzakutts could afford to buy it. 27 In Dushah bazaar the price was lower, but in parts of Chitral and in Hunza the traditional laborious leaching method was being used to obtain an inferior saline liquid. But even the most rigorous application of the traditional 'techniques' of self-sufficiency and the most favourable opportunities for cultivation did not prevent the break-down of the traditional dependence of each local population upon the resources of its own geographical area.

In the past any grain deficiency was made up locally, by means of barter transactions in animal or other products, by service or tenancy with landlords, or by taking up some additional craft occupation. With the development of more deficiencies among larger proportions of local populations the circle of exchange widened geographically, and deficiencies had to be made up from other localities at progressively

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27 E. Lorimer, 1939, p.211. The price then was about 1½ annas per lb., which represents half the present price, when changes in the value of money are discounted.
greater distances. Since the costs of transport have effectively minimized movements of grain, and individuals have sought the nearest supply or outlet, it is possible to rate a village, a locality, or a district as being deficient or surplus in grain production. This conception was found to be familiar to cultivators in the region.

The result of the outstripping of the cultivated area by population was the appearance of locality grain deficiencies. These had begun by the beginning of the century in Hunza, and subsequently developed in Astor, parts of Gilgit and parts of Chitral. For the first two or three decades of the century they were made up from adjoining districts: the deficiency of Hunza was made up from Nagar, that of Astor from Bai and from the Vale of Kashmir, that of Gilgit town from the Gilgit valley and from Yasin, and the occasional village deficiencies of Chitral, especially of upper Chitral, were made up from surpluses within the state and from Gupis.

Since 1947 the already-existing deficiencies have grown, and with them the scale of movement of grain from one district to another. It was estimated in Gilgit town that nearly 20,000 maunds of wheat and maize are now being brought annually to the bazaar from Punial and the Political Districts, while the total movement of all agency-grown grains through the bazaar is estimated by dealers to be about 25,000 maunds per year. 31

28 See also Schomberg, 1935, p. 136.
29 See also H.I. Harding, Diary of a Journey from Srinagar to Kashgar via Gilgit, Kashgar, 1922, p. 13.
30 Schomberg, 1935, p. 64; R. Lorimer, 1939, p. 266.
31 As grain has become increasingly scarce in some districts and has had to be brought greater distances, so its price has risen at a faster rate than general prices. Allowing for changes in the value of currency, the prices of wheat, maize and barley in Gilgit town have approximately doubled since 1915. Prices for 1975 which "... may be taken to represent fairly the local value of the grain" are wheat, Rs. 3, maize and barley, Rs. 2.80 per maund: Talbot, 1916, p. 18.
One striking change has been the development of small village deficiencies in every part of Chitral, but to some extent these are anomalous, in that many are offset by cultivators being able to buy back from the state government, at a fixed price, that 10% of produce taken as uahr. Of 42 villages in Chitral, 33 reported a village deficiency, but in 22 of these the amount is made up from the local state granary and is equivalent to, or less than, the amount paid in tax. With a part-money tax there would not be so high an incidence of village deficiencies. Nonetheless there are shortages in Laspur, Baroghil, parts of Mulikho and parts of southern Chitral. Deficiencies that have also recently developed in Chilas and Chauri Kohistan are being offset by small imports from Kaghan and Swat.

More significant, in respect of an overall regional grain deficiency, has been a change since 1947 in the disposal of Government-imported grain. In the early years of the century the imports were for official personnel, army garrisons etc. who were stationed in the region, but not for the permanently resident population. Since 1948, when the Northern Scouts were raised in the Gilgit Agency, supplies have also been imported for a section of the regional population. This tendency has been strengthened during the 1950’s: in addition to imports for the scouts, a part of the Government-imported grain has been made available, at the official subsidized prices, to any regional inhabitants who satisfy criteria of being in need. Such an arrangement has also been operating in Chitral since 1957.

Precise figures for the volume of Government imports are not available, but in 1963-5 they were probably about 15,000 maunds per year into the Gilgit Agency, (excluding Northern Scouts, for whom a further 4,500 maunds were probably imported), and 30,000 maunds per year into Chitral. Of the latter amount about two-thirds are now

32 Grain paid as tax-in-kind also contributes to deficiencies in districts in the Gilgit Agency, but in general the incidence of taxation there is lighter.

33 In Laspur, where uahr was excused for fifty years, its introduction in 1945 led to a sudden increase in deficiencies, although per capita production was not reduced.

34 See also Richard Cable, unpublished MS; Richter, 1962, p.74; cf. Isfar ud-Din, 1965, pp.147, 178, who gives 50,000 maunds per year, and Aurul Islam Mian, 1956, p.49, who gives 103,000 maunds.
being consumed by permanent residents, mostly in the localities of Chitral town and Drosh. The imported grain is sold at fixed prices: Rs.23 per maund in Gilgit and Rs.14 per maund in Chitral and Drosh, the subsidy being equivalent to the difference between this price and the total cost to Government, much of it incurred in transporting the grain from downcountry. This volume of imports, including both Government-subsidized and the small quantities taken from Kaghan and Swat, is equivalent to only a small fraction of the total regional output – for Chitral about 5% \(^{35}\), and for the Gilgit Agency a smaller proportion – and of this only a part is consumed by permanent regional inhabitants. Nonetheless this trend is a striking indication of the instability of agricultural production to keep pace with the growing population, and informants stressed their conviction that this dependence upon the outside world for essential foodstuffs is an altogether new departure for the region’s economy. \(^{36}\)

Barter and Cash Transactions in the Principalities.

Where cultivators do not produce sufficient grain for their household requirements the deficiency is usually small, seldom exceeding 10 maunds. 33 cultivators from various localities in the principalities who reported grain deficiencies stated that these had been made up during the previous

\(^{35}\) Calculated from estimates of annual agricultural production given by Iqar-ud-Din, 1965, p. 146; from estimates of average annual consumption per capita; and average annual production per landholding.

\(^{36}\) Although figures are not available, the subsidies must represent a considerable expenditure by Government. The normal air-freight charge per maund from Rawalpindi to Gilgit town is Rs. 35, and rates by road from Balakot via the Babusar pass are approximately the same. When the purchase price of wheat to Government is Rs. 15 per maund, the total cost per maund delivered at Gilgit town is Rs. 50, (without allowing for additional costs, but taking freight rates at the commercial maximum). Of this, Rs. 23 is recoverable from purchasers. The total subsidy for imports to the Gilgit Agency alone is therefore about Rs. 350,000 annually; for Chitral, although the cost per maund is less, the total weight is greater and the selling price lower, and the total cost is probably at least as great. Of the overall total the largest part may be an 'administrative cost' incurred in supplying Government officials, but the share required to make up production deficiencies is nonetheless significant. See also Dawn, 15th July, 1954.
12 months by purchases averaging 6 maunds per 4-member household. Some deficiencies of this size and smaller continue to be made up among villagers by barter transactions involving animals or fruit, or more often animal products - butter, goat-hair, woollen cloth, etc.

However the number of cultivators who can make up their grain deficiency by exchange for other surplus produce is becoming smaller. More commonly, and especially in localities where there is an overall grain deficit or surplus, where the local market for other agricultural products is limited in relation to the demand for grain, or where grain purchases have to be made in cash (as from the Chitral State granaries), the tendency is increasingly away from barter and increasingly towards the transactions of all cultivators being calculated and made in cash. By means of cash transactions many cultivators who buy grain and who have a surplus of other produce are able to continue the exchange of one for the other, even though increasingly long distances may now separate consumer and producer. Nor is all the produce sold by cultivators consumed within the region; there has been a continuing downcountry market for clarified butter, woollen cloth, goat-hair, skins, dried fruit, kernels and nuts. In addition the non-agricultural populations of the bazaars and administrative centres, together with travellers and visitors, offer a small market to cultivators, especially in adjacent villages, for milk, eggs, fresh fruit, wine, vegetables and meat.

The sale of animal products is a widespread, if often small, source of cash income, especially in Chitral and the Political Districts, where in 24 out of 32 Kho, Shin and Yeeshkun villages it was reported that there is a net annual export from the village of cloth, goat-hair or butter. In these villages, an average of 67% of the cultivators were

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37 A maund is reckoned in the region to be a generous estimate of the average annual grain consumption per adult.

38 Such exports are subject to Government controls, and would otherwise be larger for some commodities. For example, clarified butter cannot be exported from Chitral. In 1964, when controls upon the export of walnuts from Chitral were temporarily lifted, the price per maund rose from the official state granary price of Rs.15 to Rs.23. In one or two seasons, when fresh fruit was not reaching Pakistan from Afghanistan, there was even a small export of fresh fruit to Peshawar and Rawalpindi which was encouraged at that time by concessionary freight-rates.
reported to sell - or to barter, but in cash terms - to an average annual amount which is calculated at Rs.51 per selling cultivator. Sales of whole animals are much less frequent and were reported to occur regularly in only 5 of the 32 villages, and then only among a small number of cultivators: animals and fruit-trees continue to be regarded in the same way as land, i.e. as essential productive assets, and are disposed of only at a time of necessity. In villages where apricot and other fruit-trees are well-established and numerous, the sale of dried fruit and kernels may be an important source of income, as in Pumial, Nager and the Kho villages of lower Chitral. In Tongdas, for example, where 8 out of 10 farmers reported a grain deficiency averaging 7.25 maunds, (representing a value of about Rs.150 at Furrial prices for wheat and maize), 5 had sold dried fruit and kernels to shopkeepers to an average value of Rs.54.

It seems likely that, apart from any changes in the average sizes of flocks and herds since 1900, the per capita consumption of animal products has declined, while an increasing proportion of the products is being exchanged for grain or sold for cash. Woollen cloth, for example, is now being sold by many households where formerly it would have been used, not only for the cloaks and caps which continue to be made, but also for the shirts and trousers for which cotton is now preferred. There is not likely to have been a significant change in total fruit production, but similarly, a smaller proportion is now being locally consumed - or wasted: see Little, 1892, pp.26-7, - and a greater proportion is now being sold. A fall in per capita consumption of dairy products and fruit is often observed as an exchange economy develops, and is often associated with an alleged or real decline in the quality of the local diet. In general, the introduction of a money economy has been a serious factor in nutritional imbalance", Margaret Mead (ed.), Cultural Patterns and Technical Change, Paris, 1955, p.215. Without this suggestion having been put to them, many informants in the principalities expressed the opinion that a decline of this nature had taken place, or is occurring, in villages in the vicinity of the bazaar and administrative centres. See also Elizabeth E. Hoyt, "The Impact of a Money Economy on Consumption Patterns", The Annals of the American Academy of Political and Social Sciences, CCXXV, (May 1956), p.46.
But the number of households, whether grain-deficient or not, in which it was reported that the sale of agricultural products and fruit provided the only source of cash income was small. Nor has making up deficiencies in one kind of agricultural produce necessarily been a specific objective in selling surplus produce of another kind; purchases of imported goods are now at least as important in terms of expenditure as purchases of regional produce. It is only those members of the ruling families and aristocracies whose holdings and resources remain much above the average who can continue to maintain their charitable obligations and also to sell agricultural products in sufficient quantities to finance all their purchases of imported goods.

For the majority, deficiencies in grain production have coincided with a movement in search of additional non-agricultural income, and labour has become an increasingly large 'export' from individual households throughout the principalities. Where employment has taken cultivators away from their home localities, and especially where they have travelled downcountry, this in itself has further encouraged the spread of new ideas about the outside world, the market economy and the satisfaction of tastes and ambitions. The continuing spread of shops in the region, the improvements in communications and the greater degree of integration of the region with downcountry Pakistan have contributed to this.

Since 1947 the demand for imported goods has become firmly established among even the lowest classes of the principalities, although not among the Gujars nor the minority groups of southern Chitral. Tea, salt, cotton cloth and metal utensils are universally used in the principalities, and in many households there has been an additional

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40 Within the last decade, charas has become an important crop in Chitral, and a major source of income for some cultivators: see below, p. 232-5.

41 An example is provided by the Lambadar of a village in Gilsit, whose land-holding is 15 acres, whose cattle number 17 and whose fruit-trees are of 14 species and number 146 trees, who reported sales of agricultural produce totalling Rs. 780 during the previous 12 months, in addition to a considerable expenditure (including the slaughter of two bullocks), for the poor of the locality.
widening of the consumption range to include goods such as kerosene, cigarettes, sugar, rice, soap, crockery, schoolwear, facture and cotton quilts, and to include new services such as travel by jeep and air.

In the acafellous communities, and among the groups of southern Chitral, such changes and sequences are not observed. Individual grain deficiencies that are reported to have developed recently in some districts, notably in Chilas and Gavri Kohistan, appear to have been distributed among those who have no rights to land. Data for earlier years are mostly lacking, but in recent decades the populations of the acafellous communities appear to have been rising at rates comparable to those in the principalities: while the extension of cultivation may have proceeded at a pace that allows farmers to maintain their self-sufficiency, if not to exceed such large quantities for funeral and other feasts, the per capita share of the landless has probably not risen in the same proportion. This may be partly a result of the continuing immigration of Gujjars. Jettmar suggests that in Tuir increased competition among labourers for employment has contributed to their inferior economic circumstances, and he describes the high incidence of indebtedness among labourers resulting from their having to borrow grain from their employers. 42

The response to grain deficiencies among the landless and the indebted has been to seek additional winter employment nearby: this has recently become available in the vicinity of several of the communities with the construction of the Indus valley road, and many individuals in the villages of Chilas were reported to take employment there in the winter months. Among the Gavri, it was reported that the landless go to Swat in search of winter employment. Earnings from such employment are used to purchase grain in Swat or Kaghan, which is brought by the individuals concerned for their own consumption or the repayment of their debts. Such earnings are seldom used for the purchase of manufactured goods, nor for new services such as jeep transport.

Even among landowners there has been very little change since the end of the 19th century in the pattern of consumption in the accephalous communities, or among any of the minority groups of southern Chitral, or even in Haramosh. Cotton cloth, salt, iron, metal utensils and guns continue to be imported in exchange for woolen cloth, goat-skin and skins, but there has been little increase of the other items that have come to be widely accepted in the principalities, for so rarity at present consumed only in the vicinity of Chilas and Kalam bazaars by the few who have had contact with the principalities or with downcountry. Occasional sales of a few livestock by farmers were recorded, but were regarded as having been made necessary by some 'external' circumstance, such as the imposition of a fine for homicide, or, increased by the resolution of a dispute by means of litigation instead of conflict.

Although improved communications reached the accephalous communities later, and are more thinly spread, and although shops and markets are at greater distances, there has been ample opportunity for farmers and landlords to exchange agricultural produce for a wider range of imported goods, and ample knowledge of the market for surplus produce. It appears rather to have been the particular features of their political, social, and economic organization that have made for this conservatism and absence of response - features such as hoarding for feast, the expression of wealth in terms of livestock, the absence of personal ostentation and expenditure, control by the Jirga on the disposal of produce outside the community, and the absence of any focus within the community for innovation and effective change. In the principalities, grain deficiencies have at least contributed to the movement towards exchanges and cash transactions within the regional economy. In the accephalous communities, grain deficiencies have occurred among the landless, who have no share in other resources, for whom local economic opportunities are strictly limited, and whose recourse is to look outside the regional economy.

43 See also Beth, 1956b, p.27.
44 ibid, 1956, p.231.
The menace of Agriculture.

There have been few significant changes in the agriculture of any part of the region during the 20th century despite the additional demands made upon it. Even in the principalities it is conducted almost entirely according to traditional practice, and remains subsistence-oriented. The agriculture has remained largely unchanged owing to the weight of the traditional and continuing dependence upon it as the major productive activity, in which any additional uncertainties are not willingly introduced, and to the relatively short time firstly, since regular contact with new ideas was established, and secondly, since production deficiencies became widespread. Both of these important changes have come about within living memory.

While 90% or more of the population continue to practice agriculture (i.e. including those who have additional occupations), those individuals who receive higher education tend (with notable exceptions) to abandon their direct links with agriculture and to leave the cultivation of their own land to servants and tenants. There is therefore a "failure" on the part of a section of the population that might otherwise assist to demonstrate new techniques, to encourage a more equitable and efficient utilization of resources in more districts, and to dispel uncertainties about investment in improvements. There is also an apparent lack of success by the agricultural services in providing cultivators with appropriate new techniques—nor is it even certain that, with existing resources, any improvements can be made in those districts were the intensity of cultivation is already high.

There has been more extension of irrigation and cultivation in most districts. In Chitral and Gujrat the upper altitude limit has been raised at the heads of several valleys, and there have been additions to the cropped area by increased double-cropping and reduced following. Whether there has been any increase in the intensity of cultivation is not clear, but informants stated that if there has been any increase it is insignificant, and may be associated with a falling size of holding, rather than represent an increase in labour inputs per

45 See also Iqar-ul-Mir, 1965, p.177.
cultivator. There is no evidence of any trend in crop yields, nor in horticultural output per unit area, except that with the establishment of permanent rights to particular plots there has been some planting of fruit-trees in the aeshaloom communities, and the spread of more recently-introduced species such as apple and apricot.

There have been some small technical changes as a result of new materials being employed. The use of metal implements spread with more imports of iron after 1960; wooden hayse-hedges and horn pick-hedges have been replaced, and plough-shares are now widely fitted with metal tips. The use of metal sickles in west districts results in the crops being cut instead of uprooted, so possibly leading to some slight increase in humus content. Metal is more durable, but its use has not led to any change in the basic design of local implements, nor does it appear to have contributed significantly to any increase in productivity. Imported blasting powder has also become available and is increasingly used for splitting boulders on fields. Blasting powder and metal implements have also been used in constructing and enlarging irrigation channels, and so have facilitated the extension of irrigation.

More conspicuous have been changes in the relative proportions of some crops grown in the principalities. The replacement of millet by maize, which began in the south two centuries or more ago, is now almost complete. Whether the replacement has led to changes in total grain output per unit area depends upon whether maize is being grown as a single crop, where formerly two crops were raised (as in Tangir), or whether it has become the second crop in a continuation of double-cropping. In the latter case, characteristic of the north of the region, total output per unit area has been raised because the yield of maize is normally higher than that of millets, although its dietary value is less. Millets continue to be grown on unmanured fields or where water is scarce, and they are also grown where it is possible only in this way to raise two crops in a year, i.e., where maize as a second crop would not ripen. Millets also appear to be retained to a larger extent by the Kalash; this is explained locally as a taste.

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46 Jettmar, 1960a, p.130.
preference.

Potatoes are said to have been introduced to the Gilgit Agency during the 18th century, but they have been cultivated in upper Chitral for longer. In some northern localities the crop has recently been adopted as a field crop, as in parts of Hunza and on the bad soil of Baniyor. Under favourable conditions the potato gives a yield ten times that of maize, but its nutritional value, weight for weight, is only about 15% of that of grain.

A few acres of cotton were formerly grown in southern Chitral, Gilgit town, and the Indus valley for domestic use. It was mostly abandoned by the end of the 1930's owing to the availability of imported cotton cloth and to the growing scarcity of grain, but a small quantity continues to be grown around Arundu and is used there for stuffing quilts.

The only crop that has been grown primarily for sale is charas, Cannabis Indica or Indian hemp. This is widely cultivated in upper Chitral, but restricted by its climatic requirements to altitudes between 5,800' and 11,000'. In the Gilgit Agency it is prohibited, although it may be grown in Ishkoman for domestic use; and a few individuals in Gawri Kohistan have begun cultivation within the last two or three years under licence from the Swat government. The drug prepared from the plant was an article of trade between Eastern Turkestan and British-India, and was among the goods carried through the region in the 1930's. The plant itself was introduced into Chitral and its cultivation officially encouraged in the late 1930's by the ruler, who envisaged increased incomes for cultivators, but it does not appear to have been widely planted while supplies of the drug continued to be available from Turkestan. Charas from there is said to have been of superior quality.

Since the closing of the Eastern Turkestan border in the 1930's

47 Paffen et al., 1956, p. 31.
48 Clark and Macwell, 1964, p. 50.
49 Lockhart and Woodthorpe, 1989, p. 67; Chekuri Singh, 1917, c. 80.
there has been a considerable expansion in churah cultivation in upper Chitral. Of 33 Chitral villages at suitable altitudes for which data were collected, churah cultivation was reported in 17, all of which were in Luthu, Turikha, Pulikha or Varikhah. The reasons for the concentration in these districts are, first, that villages north of Shigar and Naran are at altitudes too low for churah cultivation, second, that none of the minority groups who inhabit the tributary valleys of southern Chitral cultivate or consume churah, and third, that its cultivation is reported to be associated with the Ismailis, who are predominant in the north and west of the state. In some Sunni villages local religious leaders were reported to have forbidden it on the grounds of its narcotic properties, and it was further suggested that in general the Sunni ethic is less favourable to churah cultivation than the Ismaili. 50

This is supported to some extent by the fact that of the 17 villages where churah is cultivated, 9 are wholly Ismaili, 5 are part Sunni and part Ismaili, and 3 wholly Sunni. In another 4 villages in the same districts where churah is not cultivated, 2 are wholly Sunni, 1 part Sunni and part Ismaili, and 1 is wholly Ismaili.

In the churah-growing villages most cultivators were reported as sowing one field of about 1 acre, and producing from this between 5 and 20 lbs. of the drug. Yields are more susceptible to climatic and other variables than those of grain crops, and the preparation of the drug itself is a skilled and time-consuming process. Some of the cutout is consumed within the state, but most is sold and exported. The price received by farmers who sold to traders in their own localities in 1963 was approximately Rs. 20 per lb., but a few years previously prices had reached Rs. 70 per lb. Expansion of production over the last five years coincided with a fall in prices, and it was reported in 1964 that some of the crop still remained unsold at the end of the year.

If the price of wheat in northern Chitral is taken to be Rs. 15 per mowad and the average yield in 14-16 mowads per acre, then with an average yield of only 20 lbs. of the drug per acre, when the cultivator's

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50 This is held to account also for the occurrence of wine-making only in Hunza, Punial, the political Districts, and the north and western parts of Chitral.
price per lb. exceeds Rs.11, the return on charas cultivation is
greater, assuming other things are equal. Costs per acre for charas
cultivation are in fact considerably higher: following is necessary
in alternate years; even with heavy manure inputs charas exhausts the
soil with deleterious results for the yields of other crops for several
years afterwards; and there are no by-products of straw and chaff for
 fodder. Nonetheless a price of the order of Rs.70 per lb. clearly
represents a higher rate of return, even taking these other consequences
into account.

Most of that which is marketed passes through the main bazaars of
the south of the state, where there is a state sales tax of Rs.5 per
lb. If it is exported from the state it is further taxed at the rate
of Rs.11.50 per lb. 51 As high a proportion as one third of Chitral
state revenues are now derived from taxes on charas. To possess the
drug south of the Kohala and Agency is illegal, and exports are concealed
after being taken into Dir. Some quantity of the drug is also smuggled
via the Katchakani pass to the bazaars of the south of Swat state in
order to evade the taxes payable, but figures for the latter trade are
not available. Chitral officials estimate that approximately 500
mounds of the drug are exported annually on which the export tax is
paid, but this figure may be an exaggeration.

Despite its high costs of production, the risks of yield variation,
the fluctuations in prices and the difficulties of exporting the drug,
charas has come to be an important source of income for many cultivators
in northern Chitral. 53 The income, like that from the sale of animal
products and from employment, is used primarily to purchase manufactured
goods and to make up grain deficiencies.

It has been suggested by several informants that the rapid
expansion of charas cultivation has made a considerable contribution

51 These data were provided by the Chitral state revenue authorities.
Other informants have reported that there is a single tax of Rs.15
per lb. payable on the drug at the time of sale by the cultivator
to the charas contractor; see also Richard Gable, unpublished MS.
52 See Nurul Islam Mian, 1956, p.93.
53 Izar-ud-Din, 1966, p.147 has described charas as the 'backbone'
of Chitral's economy.
to the rising incidence of individual grain deficiencies, and to the overall grain deficiency of the state. They suggest that the availability of imported grain at subsidized prices has encouraged "charah"-growing, and that if at some time in the next decade "charah" is officially discouraged (in the same way that hillside cultivation has been discouraged) then some improvement in the grain-supply position might be expected.

Cultivators draw a distinction between "charahs", which they regard as being grown specifically for sale and for planting according to their expectations of future cash returns, and grain and other crops. They stated that even where a saleable surplus of grains, pulses or fruit is produced annually, they do not take the relative prices of these into account when sowing and planting. The suggestion of two differing supply elasticities in response to price in accordance with Falcon's findings in the West Punjab, where a smaller response in the area sown with home-consumed grains is in contrast to a considerably greater degree of reaction to changes in relative prices for those crops that are sown for the market.

54 See also Cambridge Chitrali Expedition, n.d., pp.11-13; L. Faruq-ud-Din, 1965, p.147.
55 The only quantitative data available are for wheat and barley as alternative crops in Gilgit. Between 1942 and 1953 the area sown of each remained constant, in relation to the total cultivated area, to within 2%, despite the consistently higher price of wheat. The price differential probably represents the general preference for wheat for consumption, in conjunction with the generally higher yields that are obtained from barley and with the requirements of altitude in some villages, especially where only by growing barley as a first crop is double-cropping possible. (In Gulma village it was reported that there is some increase in the area of barley sown in relation to that of wheat as a result of attempts to raise the upper limit of double-cropping.) Barley has the additional advantage that it ripens earlier in the spring, when grain may be especially scarce. (Data for wheat and barley show that the areas sown with each in Gilgit were 57.5% and 2-10% respectively; data provided at the Tehsil Office, Gilgit.)
The Market in Agricultural Land.

In the asephalous communities the restrictions upon alienation were specific and rigid, but even in the principalities, so far as existing villages were concerned, outsiders or members of groups not locally resident were not normally permitted to acquire land and alienation procedures were, effectively, almost as strict and exclusive. It was normally only through the allocation of land by the state government that outsiders and members of other groups did acquire land, and this by the over-ruling of existing rights, for even barren land was generally subject to proprietary claims by local inhabitants.

Where a centralized government acquires paramount rights to all land, and where landownership becomes more individual and less associated with descent organization, then it becomes more important as a criterion of status within the new system of social hierarchy. Those whose sense of continuity with the past is strong, and who can trace their ancestral occupation of particular plots or estates back for many generations, regard this as part of their claim to high social status. In Chitral, for example, the continued occupation of ancestral land is one of the criteria for membership of the Amanzads class. Such individual non-economic returns from the possession of land continue to make for a sense of identity, especially among the upper classes, to part with land even where political controls and communal sanctions upon alienation have been relaxed. Herskovits stresses the importance of non-economic elements in the value attached to land, and mentions 'emotional attachment', which was reported by landowners, especially among the upper classes. 57

57 Herskovits, 1938, p. 333. An instance was recorded in Chitral where a member of the ruling family was proposing to repurchase - at any price and for no particular future use - land in a neighbouring village that had been ancestral property, had been inherited by two cousins of his, and had been alienated by them.
Added to non-economic restraints upon land alienation is the inevitable economic dependence upon land as the chief source of food production; and it was suggested in several localities that farmers are now less willing to part with their land, even within the possibilities of the traditional alienation procedures, than at times in the past.

Nonetheless within the last few decades there has developed a small market in land in some bazaar localities, notably Gilgit town. The break-down of some of the rationale of traditional political and social organization, and consequently of the conventions concerning land, occurred in Astor and Gilgit a hundred years ago. From that time there have been garrisons, outsiders and Government institutions present in the main settlements of these districts, but it was not until the 1890's that Government activity began in other districts, and then the traditional administration and procedures were mostly allowed to function with only minor alterations.

The importance of the presence of garrisons and Government institutions for the development of a land market was that land was required by them and was taken periodically. The acquisition of land for official purposes has continued through the 20th century, and has probably been taking place at a faster rate since 1947, as a result of the expansion of Government services and the establishment of new departments. This has not only occurred in the administrative centres, and not only in the principalities, but in every village where a school, rest-house or dispensary has been built. For such building purposes, barren or waste land is often acquired, but even then it represents property to which local inhabitants have rights or claims. The taking of land for such purposes, and the compensation given, is often the first demonstration of a transfer of ownership outside the landowning group or the permanent village population: in all the major settlements, the mandatory purchase of land for Government purposes has been a stage that has preceded any tendency towards the disposal of

(continued from p. 236) attached to this situation was regarded as being all the greater because, first, the particular plot of land was associated with certain historical events in the early ascendency of the Matore family, secondly, the land had been alienated to individuals who had served previous owners as servants, and thirdly, because the proceeds of the alienation had been consumed and had not been spent productively.
were initially encouraged by the Agency administration. These schemes allowed the migration of small numbers from other parts of the Agency, particularly Burusho from Hunza and Nagar, to Gilgit, where permanent rights to barren but irrigable land were allotted to them. Existing local claims and traditional rights to the land were overruled, though even in the longest-established of these settlements there may continue disputes with members of the local land-owning group over the land or over the division of the irrigation water. Such resettlement has done much to encourage physical mobility and to demonstrate the possibility of moving from ancestral villages to other localities when land is made available.

In Gilgit town it is now possible, not only for Burusho and other inhabitants of the Agency to buy land, but also for outsiders such as shopkeepers to do so. Some sales of land in the bazaar are reported to occur without reference to social or political considerations at all. In Chitral town, Drosh and the smaller centres the process of alienation has not gone so far. In Chitral town, although a considerable amount of land in the vicinity of the bazaar has been acquired for official purposes and although there are now no explicit sanctions upon alienation other than those of the Shariat law, it continues to be regarded as shameful for a farmer voluntarily to sell his land to

58 See also Census 1941, XII, Part III, p. 28.
59 As e.g., at Katun Ban, which was abandoned about 1940 after a flood, which no surrounding village would recultivate, and which was given to Hunza Burusho in 1905: Military Report and Gazetteer, 1922, no. 199; Band, n.d., pp. 129-30.
60 A contributory cause is probably the high price of bazaar land in Gilgit: one exceptional sale was reported where the price had been Rs. 16,000 per 1/10 acre, which is four times the highest price reported from Chitral town and twenty times the price of local agricultural land.
Government institutions without first giving the option of purchase to his brothers and kinsmen as under the traditional alienation procedures. Nonetheless a small number of Pathan shopkeepers have recently acquired plots of land in Chitral town, mostly for business and domestic purposes. One or two examples of outsiders who have acquired land were also given by informants for Yassin and Ishkonan.

In Kalam, where the process of alienation to outsiders also began recently under an external administration – in this case, the Soviet State government – the traditional corporate organization and xenophobia was reasserted after two Pathans had obtained land for their personal use. A delegation of Kani successfully petitioned the Wali to ban further purchases by outsiders for non-official purposes. \(^{51}\) In Chitral the success of the small number of Pathans in obtaining land in Chitral town has led to more movement among the local elite population in favour of some legal barrier to such alienation. These movements, together with a consideration of the circumstances in which outsiders and immigrants have acquired land, support the suggestion that the break-down of traditional political organization and of the corporate unity of local populations is a condition that favours the growth of a market in land. In Bunza, Sarez, Chashai, Zenda and some of the Shinaki districts, where traditional organization remains more nearly intact, and where Government institutions are less frequently located, there is no market in land. \(^{52}\)

Even where a relaxation of restrictions does occur, this in itself does not provide any additional resources or alternative local employment opportunities. Where farmers and landlords have taken full-time non-agricultural employment – in Government service or business – it is invariably for them to continue to own land in their natal village and often, if their place of employment is a long distance away, to acquire a holding there also, not only for domestic building, but

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51 See Earth, 1956, p.60.

52 The exception in Shinaki is Chiles, where some labourers have recently acquired land in the villages in which they were resident. In Chiles village some at least of this process was directly initiated by Government officers: Stain, 1922, I, p.112.
also for agriculture. Such a process is seen around Gilgit town, where much of the newly-irrigated land is owned by government employees who have left their inherited holdings in other districts to be cultivated by relatives or tenants. How far this process represents traditional attitudes, and how far it is based upon present-day economic considerations cannot be shown; certainly the traditional orientation towards individual self-sufficiency continues to be encouraged by the overall regional deficiency of foodgrains and the difficulties and uncertainties of importing the few essential supplies from downcountry. In the spring of 1964 there were temporary difficulties over transport, grain supplies in Gilgit town became very scarce, and the price of wheat rose to 960 per maund. Those who face difficulty in such circumstances are not only the landless outsiders who are employed in Gilgit town, but also those regional inhabitants who are employed there but whose home localities and farms are at long distances from Gilgit town. It is however not only those regional inhabitants who have moved to Gilgit town for government service or business who have acquired land there, and it is general changes in the ownership of agricultural land that inhabitants of the region see as indicating a difference in the economic behaviour of certain groups.

The development of a market in land in the bazaars for business and official purposes is seen by informants as a process distinct from the migration of cultivators from one district to another and their acquisition of new agricultural holdings. This second process is occurring in the villages around Gilgit town and in the Kalash valleys, where Burusho and Aro are slowly replacing Shina and Kalash respectively. This is taken as evidence of a greater propensity for cultivation and long-term investment among the Burusho vis-à-vis the Shina, and of lower levels of economic sophistication among the Shina and Kalash.

Migration of Burusho to Gilgit has continued since the officially-sponsored resettlement schemes of earlier decades. At that time the migrants were allotted barren land, and one of the circumstances then taken into account was the ability of the local population to utilize the land proposed for reallocation. In several instances the
construction of a channel involved technical difficulties or investment greater than the inhabitants of neighbouring villages were willing or able to make. The success, in this situation, of the Suruho in bringing their existing cultivation area contributed to the relief in their superior channel-building skills and their capacity for co-operative enterprise. One example, mentioned above (p.258), was at Katun Das. Another was Oshkundas, where the right-holders of Begrot had tried unsuccessfully to construct or reconstruct a channel, and the Mir of Hunza was then offered a share of the land in return for the services of Hunzakuts in building the channel. Other villages in Gilgit where Suruho were settled were Dainyor, Jutial, Sonikot and Nomal.

At the time of the official resettlements, the migrants were given barren land only, but they have since both extended irrigation and, more significant, have to a considerable extent replaced Gilgitis, especially Shins, in the owners of the original settlements. The process is strikingly illustrated at Oshkundas. In 1938 or 1939 when the channel was built, the Mir of Hunza was given a sixth of the total irrigated area which he rented to 57 Suruho households for nominal amounts; the remaining five-sixths of the land was divided among the inhabitants of Farful and Bulche villages. The average size of holding at that time was nearly two acres. In 1933 there were 260 households in the village, of which 200 were Suruho, (although some of the Begrots had remained domiciled in the Begrot valley). The Suruho by then owned or cultivated two-thirds of the irrigated area, and some had increased their holdings to 8 acres; most of the Begrots had sold their land and returned to the valley, and none who remained had increased his initial 2 acre holding. In Dainyor, traditionally a Shin village, Suruho have migrated since 1933 and now form nearly half the population: similar replacements were reported in other villages after Suruho have once acquired land.

The role of land by Shins, it was suggested, in connected with their traditional studies concerning landownership, cultivation and consumption. A specific factor is indebtedness, which was reported to be associated with characteristic practices concerning competitive
feasting and conspicuous consumption. It was observed that Shin cultivatees do not make long-term improvements to their holdings, even though Burusho techniques are demonstrated in the village, so that Shin and Burusho holdings can generally be distinguished visually in a jointly-occupied village. They also demonstrate a propensity to cut and sell fruit-trees for firewood, a striking illustration of concern with short-term cash requirements. Similar phenomena are reported in the village adjacent to Dalirw, where Citures were officially settled some years ago and who are now being replaced by Burusho. Some Shin and others who cultivate their land generally take employment as non-agricultural labourers in Gilgit town, or as agricultural labourers for the Burusho and others who have some additional employment in Gilgit town.

The expansion of the debt at the expense of the Kalash has been continuing for many decades. At the present time indebtedness appears to be frequently involved. Debts are relatively widespread among the Kalash in the villages, for example, of a random sample of 19 farmers 7 reported debts averaging Rs. 160. This tendency towards indebtedness appears to result partly from a reluctance to sell any surplus agricultural produce or assets until the debt has accumulated to a point where foreclosure occurs. This misconception is also apparently aggravated by the shopkeepers of Choral, Arun and Chitral who advance salt, cotton cloth, iron, and the beads and decorations used by Kalash women in credit, and subsequently apply the Islamic injunctions against taking interest less stringently in the Kalash. Several very small debts were reported to have been amassed in such a way that within two or three years they had become equal to the value of a field, which had been taken in payment and is now cultivated by the.

63 Shina living near Gilgit town are reported to seek prestige by conspicuous and lavish consumption of imported goods, especially tea and cigarettes, and, since the opening of butcher's shops, of meat. One instance, from several recorded, concerned a Shin farmer who exchanged his rights to 4 acres of barren but irrigable land for 250 cigarettes.

64 See also Thakur Singh, 1917, p.47.


66 See also Iqbal-ud-Din, 1965, p.185, who quotes a saying of Chitral: 'A Kalash debt is never settled'.
These changes in the ownership of agricultural land are especially significant in relation to differences in investment activity and enterprise as between one group and another, although in relation to the total area of cultivated land in the region they are negligible. Altogether these 20th century developments have had little effect upon the territorial distribution of groups that was characteristic of the 19th century. Away from the bazaar localities, the only changes in landownership that were reported were within the traditional scope for rationalization of holdings and for transfers of rights between brothers and kinsmen.
CHAPTER 12  The Development of an Exchange Economy

i  Trade in the 19th century.
ii  The Establishment of the Trade in Consumers' Goods.
iii  Population Growth and the Break-down of Self-Sufficiency.
iv  Barter and Cash Transactions in the Principalities.
v  The Revival of Agriculture.
vi  The Market in Agricultural Land.

Trade in the 19th century.

The main routes by which the ancient and celebrated trade of Central Asia was conducted lay outside the region, but offshoots used to reach the principalities. A small volume of goods came to Chitral from the north and east, and a smaller volume passed through Gilgit. In the early 19th century traders brought the precious wares of Central Asia, for which there was a market in the principalities. Prices were high, much of the cost representing the difficulties and dangers of transport on the perilous mountain paths. In the eastern part of Dardistan journeys involved risks for caravans that were of the same order as those documented for the Karakoram pass-Ladakh route, where between 20% and 40% of pack-animals were lost on each journey, and occasionally 60%. In Chitral the difficulties of the northern routes were rather less great, and there was also more grazing available for pack-animals.

To the physical and logistic difficulties were added the risks of attack and looting, particularly by Runzakute along the northern side of Karakoram watershed, and by Bashmiri and Chilaisi in the south-west and south of the region. A traveller in the Katera territory in 1870 described how the Bashmiri 'infested' the Katera and Bashmir passes and how, although the traders travelled in parties — sometimes as many as 200 men — they were frequently attacked and many of them killed. Similarly in the south-east the raids from Chilaisi prevented the use of

1  This was recorded as early as the 1820's: Moorcroft and Trebeck, 1841, p.270.
2  Aldor, 1863, pp.22-3.
3  Stein, 1877, I, p.25 and n.
4  Montgomery, 1872, p.183. See also Munphil Meer Moonshee, 1869, p.132; McNair, 1884, p.7ff.
the Babusar route and were a constant risk on the Purzil route, while disturbances and feuds prevented regular traffic via the Indus valley. The 'stunting' of trade by Hunza raids on the Turkestan-Ladakh caravans became a minor preoccupation of Government in the second half of the century, and their suppression was one of the objects of the Hunza campaign of 1891. Added to the high risks of attack at the periphery of the region were the internal uncertainties resulting from the turbulence and warfare in the Gilgit valley during much of the 19th century. Only after 1860 was there a chance for regular traffic to operate in the Gilgit valley, and this only via Ator and the Purzil route, the physical difficulties of which have been mentioned above. (See p. 197).

The purchasers of costly goods were the rulers and princes and members of the upper classes of the principalities, the majority of whom financed their purchases, directly or indirectly, from agricultural surpluses. The goods given in exchange were rich of a relatively high value in relation to bulk: gold dust, minerals, woollen cloth and woollen goods, goat hair, dried fruit, almonds, apricot kernels, clarified butter, and falcons. The trade was mostly in the form of barter; there were no local currencies, although gold dust was occasionally used. Gold and silver coins of neighbouring countries were acceptable, but there were few in the region and most of these were in the possession of the rulers.

Much of the trade was centred about the rulers themselves, who required goods for distribution among their followers and state officials and who exported in exchange similar agricultural products, and sometimes minerals, slaves, and loot from raids on caravans.

5 Biddulph, 1880, p. 3.
7 Lockhart and Woodthorpe, 1889, p. 269. When coin was obtained, it was often melted down for jewellery.
8 "The king himself is the chief merchant in the place..." via the Katora territory. "The Mullah's Journey from Jalalabad to Sarhadd-i-Nakhan by the Paroghi Pass", Report on the Trans-Himalayan Explorations, etc., Calcutta, 1870, p. 32, (for full title see bibliography).
9 "Two or three hundred slaves are sent annually into Turkestan... and constitute one of the chief exports from the (Katora) country." Raverty, 1864, p. 133. See also above, p. 71 and n.
The early 19th century caravan trade of the principalities was
costly directed northwards and westwards out of the region. With the
south there was also some small-scale trade conducted by itinerant
peddlers from outside the region who, with salt and cheap manufactures,
'penetrated the remotest glens'. Vigne mentions that peddlers from
Peshawar visited the Shinak communities with 'coarse cotton-cloths,
and raw iron'. Nonetheless, so far as all but the upper classes of
the principalities were concerned, local self-sufficiency is a more
appropriate conception for the early 19th century. Even salt, essential
for health in all diets, was often obtained locally by leasing the soil.

During the 30 years following 1860, when the Kashmir position in
Gilgit was firmly established and the route through Astore made more
secure, Gilgit's southerly trade began to expand. Permanent shops
were opened in Astore village and Gilgit town by Kashmiri who carried
on business with the increasingly accessible markets of Kashmir and
British-India. In Chitral during the same period the firm rule of
Aman-ul-Mulk and his increasing influence over the Peshawari allowed some
development of trade with Peshawar and the Pathan regions south of
Chitral.

There was not only a change in the direction of the trade but also,
and increasingly, a change in its composition towards mass-produced
items and consumables. In 1869 Munphool reported that merchants from
the north and west were bringing horses, silks, cloaks of Russian
brocadeloth, salt, cotton cloth and iron pots in exchange for slaves and
Chitral woollen goods; at the same time traders from Peshawar were
bringing cotton piece-goods, cheap manufactures, iron and salt to barter
for orpiment, woollen goods and falcons. Manufactured and mass-producer
goods became increasingly characteristic of the southerly trade.

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10 See also Ahmad Ali Khan, 1884, p.4.
11 Vigne, 1844, II, p.300. Several of the 19th century writers mention
peddlers from Koli, an acenahalas community to the south of the
region studied, but no recent information about them is available.
It is likely that as permanent shops have become established in the
region, so their business has declined.
12 Munphool Meer Mooneshe, 1869, p.133.
As the rulers' personal monopolies in trade declined, and as trade became increasingly centred about the bazaars, there was a tendency for the rulers and governors to impose levies on goods passing through their districts. By the time of the 1883-6 mission, levies on trade described as 'numerous and vexatious' were one of the chief sources of revenue for the Katore administration. The Kashmir authorities were similarly reported to be taxing goods in transit to the Gilgit valley, while the rulers of Punal, Hunza and Nagar were taxing goods entering their states. While this may have temporarily deterred merchants, the political changes of the 1890's and the subsequent improvements in the roads further and firmly encouraged the southerly trade. Taxes were standardized and arbitrary exactions abolished. Durand observed how business was increasing under the new administration.

The Establishment of the Trade in Consumers' Goods.

The purchasers of the increasing flow of manufactured and consumable goods were initially the outsiders stationed or living in the region and the wealthier upper classes of the principalities. Besides being the traditional leaders of opinion and innovation, the members of the upper classes were already accustomed to the idea of trade and were able to afford imported goods. The consumption of tea, the use of crockery and the wearing of cotton clothes became

13 Lockhart and Woodthorpe, 1889, p.268. See also Montgomery, 1873, p.194; Stein, 1921, I, p.26.
14 Marsh, 1876, p.138.
15 Administration Report of The Kashmir State for 1891-92, Calcutta, 1892, p.12. Goods entering and leaving Chitral have continued to be Lightly taxed and so contribute to the state's income. Typical rates are: cotton cloth Rs.2 per 500 yards; tea Rs.8 per maund; goat hair Rs.12 per maund. Since the 1890's such taxes do not appear to have influenced the development of trade.
16 Durand, 1900, p.17.
17 Their numbers were considerable, especially at the end of the 19th century. Early part of the 20th. In 1880 the Kashmir garrisons totalled 5,000; Alder, 1963, p.160. After the 1890's there were several hundred troops at both Gilgit town and Drosh, and others at Chilae village, Bunj, Gupis and Chitral town: Frontier and Overseas Expeditions, 1907, I, pp.4-5; Cradock, 1912, p.119; Longstaff, 1950, p.195.
symbols of high social status — an extension of the traditional social advantages accruing to those who displayed costly possessions and luxuries. Other imported goods that were sold in the growing bazaars were metal utensils and implements, sugar, tea, salt, spices, oil, cigarettes and matches.

As the 20th century advanced, demand for the new goods began to spread to the middle classes of the principalities — the Yast and their equivalents — who owned ancestral land, who cultivated themselves, and who had some agricultural surplus over day-to-day consumption. The expansion of demand was facilitated by the relative social flexibility of the principalities and the increasing contact of their populations with the outside world. On the supply side it was facilitated by the spread of shops to other centres in the principalities and by the consequent possibility of bartering surplus agricultural produce, especially grain, for imported goods. Itinerant peddlers had been unwilling to accept grain in barter but permanent shop premises with stores, together with improved roads, made it possible for traders to accept grains and other bulky agricultural products. These were both for their own consumption, and for storage and eventual transport to neighbouring localities, although in districts where there was a consistent and widespread surplus of grain there was a limit to this latter possibility. Nonetheless the majority of the population had to make considerable journeys to reach the nearest bazaar. Internal travel and transport continued to be on foot or by animal, and although easier on the wider and graded roads, remained arduous and time-consuming. Transport costs continued to add considerably, and often

18 See also Thakur Singh, 1917, p.75; Census 1941, XXII, art III, p.321; Power 1948, p.68. The consumption of tea is now taken in the region as an indicator of the establishment of new tastes. Although tea was recorded as being an occasional import into Chitral in the 1820's, it was very rarely consumed before 1890; Moorcroft and Trebeck, 1841, p.270; "The Sultan's Journey", 1876, p.31.

19 In Aitar and Gilgit it may have been further assisted by compulsory purchases of agricultural produce by the Commissariat Department: Thakur Singh, 1917, pp.82, 160-1. In general however taxes were levied in kind and did not lead to the circulation of exchange media.

20 Thakur Singh, 1917, p.82.

21 Schomberg, 1935, p.66 gives an instance.
prohibitively, to the prices of imported goods in the more remote localities.

There were many constraints on the spread of a new pattern of consumption. The idea of exchanging agricultural products for other goods was new, and was contrary to the ethos of the middle and lower classes: in the past even the upper classes had exchanged surplus produce only for value-retaining assets, and not for consumable goods, while the less wealthy had accumulated any surplus over day-to-day consumption and kept this for festivals, ceremonies and hospitality. There had been local barter transactions in agricultural products between cultivators' households and between neighbouring villages, but the commodities were familiar and locally produced, and there was no net loss to the locality in staple foodstuffs, whereas the exchange of agricultural produce for imported goods resulted in less being available for hospitable obligations. Tea, when introduced into a household, has often been reserved for guests and for special occasions, thus providing a socially-acceptable equivalent for the highest-quality local produce that was previously reserved for guests.

Feelings of 'shame' have been attached to the sale of any agricultural produce to outsiders, and in many villages the sale of fruit under any circumstances continues to be 'shameful'. Many individual informants stated that such considerations continue to influence them, although they are aware that they cannot now rationalize this. A generally greater degree of reprehension is attached to the sale of produce in order to afford consumable goods, whereas sales that are to be used to finance an enterprise (the purchase of land or animals, or a son's education) or that are necessitated by misfortune (illness or the loss of a crop by disease, and especially where the individual concerned has few resources) are generally regarded as being more acceptable.

22 This may derive from the traditional custom of allowing travellers, passers-by, neighbours and servants to have free access to orchards and to eat fruit without restriction, irrespective of the ownership of the trees. It was 'a churl who fenced his fruit trees': Lockhart and Woodthorpe, 1889, p.266. The preservation of fruit for sale conflicts with this convention.
Such constraints have been stronger among the acaephalous communities and the minority groups of the south of Chitral - Bungriks, Bashgali, and Kalash - for whom the hoarding and periodic consumption of all surplus produce, however large the surplus over day-to-day requirements, has been essential social practice for all farmers. Unlike the principalities, no social advantages were attached to the ownership of imported goods, but rather the reverse. In Gor the jirga continues to exercise a control over any proposal to dispose of agricultural produce outside the community, and there were probably similar measures in other acaephalous communities which were designed to protect their self-sufficiency.

So far as the supply of goods was concerned, the continued independence of Kohistan, Darel and Tangir, the general absence of law and order throughout Shinski, the xenophobia, and the lack of improved roads were strong disincentives to traders and shopkeepers for several decades after 1900. At the present time almost all outsiders, including itinerant traders, continue to be excluded from the inhabited areas in Darel and Gor.

As the 20th century advanced, the Turkestan and Badakshan trade became progressively less important than the southerly trade in manufactured goods. Demand for the durable luxuries was falling throughout Central Asia, as wealth was being put to alternative uses, and new ideas about saving and investment were gaining ground. The need among the princes and aristocracies for liquid assets was decreasing partly because of the wider acceptance and circulation of currency.

The trade of Badakshan and Turkestan itself changed somewhat in composition, and some utilitarian and consumable items continued to be...

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23 That this state of affairs tended to be self-perpetuating was recognized by Pakhtun Walli, whose first objective was to build roads and encourage trade and outside influences. Jettmar, 1960a, p.132.
imported into the principalities, e.g. iron cooking pots, salt, felts, and also horses and carpets. Trade in such goods between Gilgit and Eastern Turkestan continued sporadically until the 1950's, but ceased with the closing of the Turkestan border. A small but intermittent trade between Chitral and Badakshan still continues, depending upon current regulations over the closing and opening of the border. It was reported in Chitral that clarified butter, felts, goat-hair, and cumin seed are brought from Afghanistan and traded in Chitral bazaar for downcountry cotton cloth and tea, and Chitral-made woollen caps. Since Afghan nationals do not normally go beyond Chitral town, the bazaar traders are involved in this small entrepot trade.

24 Thakur Singh, 1917, p.53; Morgenstierne, 1932, p.32; Scott, 1937, p.2; Tilman, 1949, p.50; Peter Goodwin, "Gilgit Bazaar", Geographical Magazine, XXIII, No.9, (Jan. 1951), p.400 and supplement. There also developed after the 1890's, and especially in the 1920's and 1930's, a small through trade between British-India and Eastern Turkestan, but the absence of improved communications north of Baltit and Pashtuj, together with other difficulties, prevented these routes (or indeed the total volume of this trade) from ever becoming as important as had once been hoped. See Alder, 1963, p.90. In 1931, 23% of the total value of British-India's eastern Turkestan trade (i.e., about Rs.380,000 worth) at current prices - Rs.2 million) passed through Chitral, and 8% through Hunza, but the remaining two-thirds continued to be carried on the traditional route via Ladakh: Kazak, 1937, pp.98-9, 133. This through trade was of small significance to the inhabitants of the region, and by the end of the 1940's it had further dwindled. See also Scott, 1937, p.8.


26 If, as has been suggested, the border is re-opened to allow Turkestan traders as far as Gilgit town, then some entrepot trade may develop there also. See The Observer, 19th July, 1964; The Times, 13th May, 1966.
Population Growth and the Break-down of Self-sufficiency.

During the early decades of the 20th century another factor was also becoming increasingly important. At the same time as new ideas and new demands were beginning to spread through the middle classes and to the lower and less wealthy classes of the principalities, many local populations were beginning to outstrip the extension of their cultivation. The failure of agricultural production to keep pace with the growth of population has tended - probably more than any other single factor - to bring cultivation into contact with a market economy.

At first the deficiencies had some limiting effect upon the spread and acceptance of new ideas and goods, especially among the lower and poorer classes, for the growth of population progressively absorbed small exchangeable surpluses over day-to-day consumption. Informants suggested that in some districts there was a deterioration in the economic position of the lower classes. In the 1930's, Lorimer reported that although downcountry salt was available in Gilgit town bazaar few Hunzas could afford to buy it. In Bhash bazaar the price was lower, but in parts of Chitral and in Hunza the traditional laborious leaching method was being used to obtain an inferior saline liquid. But even the most rigorous application of the traditional 'techniques' of self-sufficiency and the most favourable opportunities for cultivation did not prevent the break-down of the traditional dependence of each local population upon the resources of its own geographical area.

In the past any grain deficiency was made up locally, by means of barter transactions in animal or other products, by service or tenancy with landlords, or by taking up some additional craft occupation. With the development of more deficiencies among larger proportions of local populations the circle of exchange widened geographically, and deficiencies had to be made up from other localities at progressively

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27 E. Lorimer, 1939, p.211. The price then was about 1¾ annas per lb., which represents half the present price, when changes in the value of money are discounted.
greater distances. Since the costs of transport have effectively minimized movements of grain, and individuals have sought the nearest supply or outlet, it is possible to rate a village, a locality, or a district as being deficient or surplus in grain production. This conception was found to be familiar to cultivators in the region.

The result of the outstripping of the cultivated area by population was the appearance of locality grain deficiencies. These had begun by the beginning of the century in Hunza, and subsequently developed in Astor, parts of Gilgit and parts of Chitral. For the first two or three decades of the century they were made up from adjoining districts: the deficiency of Hunza was made up from Nagar, that of Astor from Sai and from the Vale of Kashmir, that of Gilgit town from the Gilgit valley and from Yasin, and the occasional village deficiencies of Chitral, especially of upper Chitral, were made up from surpluses within the state and from Gujat.

Since 1947 the already-existing deficiencies have grown, and with them the scale of movement of grain from one district to another. It was estimated in Gilgit town that nearly 20,000 mounds of wheat and maize are now being brought annually to the bazaar from Sutlej and the Political Districts, while the total movement of all agency-grown grains through the bazaar is estimated by dealers to be about 25,000 mounds per year.

28 See also Schomber, 1935, p.134.
29 See also E.L. Harding, Diary of a Journey from Srinagar to Kashgar via Gilgit, Kashgar, 1922, p.13.
30 Schomber, 1935, p.64; E. Lorimer, 1939, p.266.
31 As grain has become increasingly scarce in some districts and has had to be brought greater distances, its price has risen at a faster rate than general prices. Allowing for changes in the value of currency, the prices of wheat, maize and barley in Gilgit town have approximately doubled since 1915. Prices for 1915 which "... may be taken to represent fairly the local value of the grain" are wheat, Rs.3, maize and barley, Rs.2.20 per mound: Talbot, 1916, p.18.
One striking change has been the development of small village deficiencies in every part of Chitral, but to some extent these are anomalous, in that many are offset by cultivators being able to buy back from the state government, at a fixed price, that 10% of produce taken as uahr. Of 42 villages in Chitral, 33 reported a village deficiency, but in 22 of these the amount is made up from the local state granary and is equivalent to, or less than, the amount paid in tax. With a part-money tax there would not be so high an incidence of village deficiencies. Nonetheless there are shortages in Laspur, Baroghil, parts of Mulikho and parts of southern Chitral. Deficiencies that have also recently developed in Chilas and Nowri Kohistan are being offset by small imports from Karhan and Swat.

More significant, in respect of an overall regional grain deficiency, has been a change since 1947 in the disposal of Government-imported grain. In the early years of the century the imports were for official personnel, army garrisons etc. who were stationed in the region, but not for the permanently resident population. Since 1948, when the Northern Scouts were raised in the Gilgit Agency, supplies have also been imported for a section of the regional population. This tendency has been strengthened during the 1950's: in addition to imports for the scouts, a part of the Government-imported grain has been made available, at the official subsidized prices, to any regional inhabitants who satisfy criteria of being in need. Such an arrangement has also been operating in Chitral since 1957.

Precise figures for the volume of Government imports are not available, but in 1963-5 they were probably about 13,000 maunds per year into the Gilgit Agency, (excluding Northern Scouts', for whom a further 4,500 maunds were probably imported), and 30,000 maunds per year into Chitral. Of the latter amount about two-thirds are now

32 Grain paid as tax-in-kind also contributes to deficiencies in districts in the Gilgit Agency, but in general the incidence of taxation there is lighter.

33 In Laspur, where uahr was excused for fifty years, its introduction in 1945 led to a sudden 'increase' in deficiencies, although per capita production was not reduced.

34 See also Richard Gable, unpublished MS; Richter, 1962, p.71; cf. Israr-ud-Din, 1965, pp.147, 178, who gives 50,000 maunds per year, and Nurul Islam Mian, 1956, p.49, who gives 103,000 maunds.
being consumed by permanent residents, mostly in the localities of Chitral town and Drosb. The imported grain is sold at fixed prices: Rs.23 per maund in Gilgit and Rs.14 per maund in Chitral and Drosb, the subsidy being equivalent to the difference between this price and the total cost to Government, much of it incurred in transporting the grain from downcountry. This volume of imports, including both Government-subsidized grain and the small quantities taken from Swat and Swat, is equivalent to only a small fraction of the total regional output - for Chitral about 5%, and for the Gilgit Agency a smaller proportion - and of this only a part is consumed by permanent regional inhabitants. Nonetheless this trend is a striking indication of the instability of agricultural production to keep pace with the growing population, and informants stressed their conviction that this dependence upon the outside world for essential foodstuffs is an altogether new departure for the region's economy.

Barter and Cash Transactions in the Principalities.

Where cultivators do not produce sufficient grain for their household requirements the deficiency is usually small, seldom exceeding 10 maunds. 53 cultivators from various localities in the principalities who reported grain deficiencies stated that these had been made up during the previous

35 Calculated from estimates of annual agricultural production given by Iqarud-Din, 1965, p.146; from estimates of average annual consumption per capita; and average annual production per landholding.

36 Although figures are not available, the subsidies must represent a considerable expenditure by Government. The normal air-freight charge per maund from Rawalpindi to Gilgit town is Rs.35, and rates by road from Balaikut via the Babusar pass are approximately the same. When the purchase price of wheat to Government is Rs.15 per maund, the total cost per maund delivered at Gilgit town is Rs.50, (without allowing for additional costs, but taking freight rates at the commercial maximum). Of this, Rs.23 is recoverable from purchasers. The total subsidy for imports to the Gilgit Agency alone is therefore about Rs.350,000 annually: for Chitral, although the cost per maund is less, the total weight is greater and the selling price lower, and the total cost is probably at least as great. Of the overall total the largest part may be an 'administrative cost' incurred in supplying Government officials, but the share required to make up production deficiencies is nonetheless significant. See also Dawn, 15th July, 1964.
12 months by purchases averaging 6 maunds per 4-member household."
Some deficiencies of this size and smaller continue to be made up among villagers by barter transactions involving animals or fruit, or more often animal products - butter, goat-hair, woollen cloth, etc.

However the number of cultivators who can make up their grain deficiency by exchange for other surplus produce is becoming smaller. More commonly, and especially in localities where there is an overall grain deficit or surplus, where the local market for other agricultural products is limited in relation to the demand for grain, or where grain purchases have to be made in cash (as from the Chitral state granaries), the tendency is increasingly away from barter and increasingly towards the transactions of all cultivators being calculated and made in cash. By means of cash transactions many cultivators who buy grain and who have a surplus of other produce are able to continue the exchange of one for the other, even though increasingly long distances may now separate consumer and producer. Nor is all the produce sold by cultivators consumed within the region: there has been a continuing downcountry market for clarified butter, woollen cloth, goat-hair, skins, dried fruit, kernels and nuts. In addition the non-agricultural populations of the bazars and administrative centres, together with travellers and visitors, offer a small market to cultivators, especially in adjacent villages, for milk, eggs, fresh fruit, wine, vegetables and meat.

The sale of animal products is a widespread, if often small, source of cash income, especially in Chitral and the Political Districts, where in 24 out of 52 Kho, Shin and Yashkum villages it was reported that there is a net annual export from the village of cloth, goat-hair or butter. In these villages, an average of 6.2% of the cultivators were

37 6 maunds is reckoned in the region to be a generous estimate of the average annual grain consumption per adult.
38 Such exports are subject to Government controls, and would otherwise be larger for some commodities. For example, clarified butter cannot be exported from Chitral. In 1964, when controls upon the export of walnuts from Chitral were temporarily lifted, the price per maund rose from the official state granary price of Rs.15 to Rs.28. In one or two seasons, when fresh fruit was not reaching Pakistan from Afghanistan, there was even a small export of fresh fruit to Peshawar and Rawalpindi which was encouraged at that time by concessionary freight-rates.
reported to sell - or to barter, but in cash terms - to an average annual amount which is calculated at Rs. 54 per selling cultivator. Sales of whole animals are much less frequent and were reported to occur regularly in only 5 of the 32 villages, and then only among a small number of cultivators: animals and fruit-trees continue to be regarded in the same way as land, i.e. as essential productive assets, and are disposed of only at a time of necessity. In villages where apricot and other fruit-trees are well-established and numerous, the sale of dried fruit and kernels may be an important source of income, as in Puniwal, Nagar and the Ko villages of lower Chitral. In Tinglas, for example, where 8 out of 10 farmers reported a grain deficiency averaging 7.25 maunds, (representing a value of about Rs. 150 at Puniwal prices for wheat and maize), 5 had sold dried fruit and kernels to shopkeepers to an average value of Rs. 54.

39 It seems likely that, apart from any changes in the average sizes of flocks and herds since 1900, the per capita consumption of animal products has declined, while an increasing proportion of the products is being exchanged for grain or sold for cash. Woollen cloth, for example, is now being sold by many households where formerly it would have been used, not only for the cloaks and caps which continue to be made, but also for the shirts and trousers for which cotton is now preferred. There is not likely to have been a significant change in total fruit production, but similarly, a smaller proportion is now being locally consumed - or wasted: see Littledale, 1892, pp. 26-7, - and a greater proportion is now being sold. A fall in per capita consumption of dairy products and fruit is often observed as an exchange economy develops, and is often associated with an alleged or real decline in the quality of the local diet. "In general, the introduction of a money economy has been a serious factor in nutritional imbalance", Margaret Mead (ed.), Cultural Patterns and Technical Change, Paris, 1953, p. 215. Without this suggestion having been put to them, many informants in the principalities expressed the opinion that a decline of this nature had taken place, or is occurring, in villages in the vicinity of the bazar and administrative centres. See also Elizabeth E. Hoyt, "The Impact of a Money Economy on Consumption Patterns", The Annals of the American Academy of Political and Social Sciences, CCCV, (May 1956), p. 16.
But the number of households, whether grain-deficient or not, in which it was reported that the sale of agricultural products and fruit provided the only source of cash income was small. Nor has making up deficiencies in one kind of agricultural produce necessarily been a specific objective in selling surplus produce of another kind; purchases of imported goods are now at least as important in terms of expenditure as purchases of regional produce. It is only those members of the ruling families and aristocracies whose holdings and resources remain much above the average who can continue to maintain their charitable obligations and also to sell agricultural products in sufficient quantities to finance all their purchases of imported goods.

For the majority, deficiencies in grain production have coincided with a movement in search of additional non-agricultural income, and labour has become an increasingly large 'export' from individual households throughout the principalities. Where employment has taken cultivators away from their home localities, and especially where they have travelled downcountry, this in itself has further encouraged the spread of new ideas about the outside world, the market economy and the satisfaction of tastes and ambitions. The continuing spread of shops in the region, the improvements in communications and the greater degree of integration of the region with downcountry Pakistan have contributed to this.

Since 1947 the demand for imported goods has become firmly established among even the lowest classes of the principalities, although not among the Gujars nor the minority groups of southern Chitral. Tea, salt, cotton cloth and metal utensils are universally used in the principalities, and in many households there has been an additional

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40 Within the last decade, charas has become an important crop in Chitral, and a major source of income for some cultivators: see below, p. 232-5.

41 An example is provided by the Jambadar of a village in Gilgit, whose land-holding is 15 acres, whose cattle number 17 and whose fruit-trees are of 14 species and number 146 trees, who reported sales of agricultural produce totalling Rs. 780 during the previous 12 months, in addition to a considerable expenditure (including the slaughter of two bullocks), for the poor of the locality.
widening of the consumption range to include goods such as kerosene, cigarettes, sugar, rice, near, crockery, clearware, footwear and cotton quilts, and to include new services such as travel by jeep and air.

In the acahalous communities, and among the groups of southern Chitrak, such changes and sequences are not observed. Individual grain deficiencies that are reported to have developed recently in some districts, notably in Chilas and Gawri Kohistan, appear to be distributed among those who have no rights to land. Data for earlier years are mostly lacking, but in recent decades the populations of the acahalous communities appear to have been rising at rates comparable to those in the principalities: while the extension of cultivation may have proceeded at a pace that allows farmers to maintain their self-sufficiency, if not to hoard such large quantities for funeral and other feasts, the per capita share of the landless has probably not risen in the same proportion. This may be partly a result of the continuing immigration of Gujars. Jettmar suggests that in Tangir increased competition among labourers for employment has contributed to their inferior economic circumstances, and he describes the high incidence of indebtedness among labourers resulting from their having to borrow grain from their employers.42

The response to grain deficiencies among the landless and the indebted has been to seek additional winter employment nearby; this has recently become available in the vicinity of several of the communities with the construction of the Indus valley road, and many individuals in the villages of Chilas were reported to take employment there in the winter months. Among the Gojri, it was reported that the landless go to Swat in search of winter employment. Earnings from such employment are used to purchase grain in Swat or Kaghan, which is brought by the individuals concerned for their own consumption or the repayment of their debts. Such earnings are seldom used for the purchase of manufactured goods, nor for new services such as jeep transport.

42 Jettmar, 1961, p.84.
Even among landowners there has been very little change since the end of the 19th century in the pattern of consumption in the acrophalous communities, or among any of the minority groups of southern Chitral, or even in Haramosh. Cotton cloth, kala, iron, metal vessels and guns continue to be imported in exchange for woollen cloth, yakhani, and skins, but there has been little acceptance of the other items that have come to be widely accepted in the principalities. See in a nutshell, at present consumed only in the vicinity of Gilgit and Saidu bazaars by the few who have had contact with the principalities or with downcountry. Occasional sales of a few livestock by farmers were reported, but were regarded as having been made necessary by some 'external' circumstance, such as the imposition of a fine for homicide, or, increased the resolution of a dispute by means of litigation instead of conflict.

Although improved communications reached the acrophalous communities later, and are more thinly spread, and although shops and markets are at greater distances, there has been ample opportunity for farmers and landlords to exchange agricultural produce for a wider range of imported goods, and ample knowledge of the market for surplus produce. It appears rather to have been the particular features of their political, social, and economic organization that have made for this conservatism and absence of response - features such as hoarding for feasts, the expression of wealth in terms of livestock, the absence of personal ostentation and expenditure, control by the Jurka on the disposal of produce outside the community, and the absence of any focus within the community for innovation and effective change. In the principalities, grain deficiencies have at least contributed to the movement towards exchanges and cash transactions within the regional economy. In the acrophalous communities, grain deficiencies have occurred among the landless, who have no share in other resources, for whom local economic opportunities are strictly limited, and whose resource is to look outside the regional economy.

43 See also Barth, 1966a, p.27.
44 Riche, 1959, p.221.
The response of agriculture.

There has been almost no significant change in the agriculture of any part of the region during the 20th century despite the additional demands made upon it. Even in the principalities it is conducted almost entirely according to traditional practice, and remains subsistence-oriented. The agriculture has remained largely unchanged owing to the weight of the traditional and continuing dependence upon it as the major productive activity, into which any additional uncertainties are not willingly introduced, and in the relatively short time firstly, since regular contact with new ideas was established, and secondly, since production deficiencies became widespread. Both of these important changes have come about within living memory.

While 90% or more of the population continue to practice agriculture (i.e. including those who have additional occupations), those individuals who receive higher education tend (with notable exceptions) to abandon their direct links with agriculture and to leave the cultivation of their own land to servants and tenants. There is therefore a 'failure' on the part of a section of the population that might otherwise assist to demonstrate new techniques, to encourage a more equitable and efficient utilization of resources in some districts, and to dispel uncertainties about investment in improvements. There is also an apparent lack of success by the agricultural services in providing cultivators with appropriate new techniques; nor is it even certain that, with existing resources, any improvements can be made in those districts where the intensity of cultivation is already high.

There has been more extension of irrigation and cultivation in most districts. In Chitral and Gujral the upper altitude limit has been raised at the heads of several vallays, and there have been additions to the cropped area by increased double-cropping and reduced following. Whether there has been any increase in the intensity of cultivation is not clear, but informants stated that if there has been any increase it is insignificant, and may be associated with a falling size of holding, rather than represent an increase in labour inputs per

See also Inmar-ud-Din, 1969, p.122.
cultivator. There is no evidence of any trend in crop yields, nor in horticultural output per unit area, except that with the establishment of permanent rights to particular plots there has been some planting of fruit-trees in the acharioum communities, and the spread of more recently-introduced species such as apple and apricot.

There have been some small technical changes as a result of new materials being employed. The use of metal implements spread with more imports of iron after 1940; wooden shovel-heads and horn pick-heads have been replaced, and plough-shares are now widely fitted with metal tips. The use of metal sickles in most districts results in the crops being cut instead of uprooted, so possibly leading to some slight increase in humidity content. Metal is more durable, but its use has not led to any change in the basic design of local implements, nor does it appear to have contributed significantly to any increase in productivity. Imported blasting powder has also become available and is increasingly used for splitting boulders on fields. Blasting powder and metal implements have also been used in constructing and enlarging irrigation channels, and so have facilitated the extension of irrigation.

More conspicuous have been changes in the relative proportions of some crops grown in the principalities. The replacement of millet by maize, which began in the south two centuries or more ago, is now almost complete. Whether the replacement has led to changes in total grain output per unit area depends upon whether maize is being grown as a single crop, where formerly two crops were raised (as in Tangir 46), or whether it has become the second crop in a continuation of doublecropping. In the latter case, characteristic of the north of the region, total output per unit area has been raised because the yield of maize is normally higher than that of millet, although its dietary value is less. Millets continue to be grown on unmanured fields or where water is scarce, and they are also grown where it is possible only in this way to raise two crops a year, i.e., where maize as a second crop would not ripen. Millets also appear to be retained to a larger extent by the Kalash; this is explained locally as a taste

46 Jettmar, 1960a, p.130.
preference.

Potatoes are said to have been introduced to the Gilgit Agency during the 19th century, but they have been cultivated in upper Chitral for longer. In some northern localities the crop has recently been adopted as a field crop, as in parts of Hunza and on the bed soil of Dainyor. Under favourable conditions the potato gives a yield ten times that of maize, but its nutritional value, weight for weight, is only about 15% of that of grain.

A few acres of cotton were formerly grown in southern Chitral, Gilgit town and the Indus Valley for domestic use. It was mostly abandoned by the end of the 1930's owing to the availability of imported cotton cloth and to the growing scarcity of grain, but a small quantity continues to be grown around Arundu and is used there for stuffing quilts.

The only crop that has been grown primarily for sale is chara, Cannabis Indica or Indian Hemp. This is widely cultivated in upper Chitral, but restricted by its climatic requirements to altitudes between 5,800' and 11,000'. In the Gilgit Agency it is prohibited, although it may be grown in Ishkoman for domestic use; and a few individuals in Gawri Kohistan have begun cultivation within the last two or three years under licence from the Sust government. The drug prepared from the plant was an article of trade between Eastern Turkestan and British-India, and was among the goods carried through the region in the 1930's. The plant itself was introduced into Chitral and its cultivation officially encouraged in the late 1930's by the ruler, who envisaged increased incomes for cultivators, but it does not appear to have been widely planted while supplies of the drug continued to be available from Turkestan. Chara from there is said to have been of superior quality.

Since the closing of the Eastern Turkestan border in the 1950's

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47 Paffen et al., 1956, p.11.
48 Clark and Haswell, 1964, p.50.
49 Lockhart and Wooldrige, 1889, p.67; Chokur Singh, 1917, p.80.
there has been a considerable expansion in *charas* cultivation in upper Chitral. Of 33 Chitral villages at suitable altitudes for which data were collected, *charas* cultivation was reported in 17, all of which were in Lutuh, Turikha, Pulichha or Yarkhun. The reasons for the concentration in these districts are, first, that villages south of Shoror and Maranua that are in the main valleys are at altitudes too low for *charas* cultivation, second, that most of the minority groups who inhabit the tributary valleys of southern Chitral cultivate or consume *charas*, and third, that its cultivation is reported to be associated with the Ismailis, who are preponderant in the north and west of the state. In some Sunni Kho villages local religious leaders were reported to have forbidden it on the grounds of its narcotic properties, and it was further suggested that in general the Sunni ethic is less favourable to *charas* cultivation than the Ismaili.

This is supported to some extent by the fact that of the 17 villages where *charas* is cultivated, 9 are wholly Ismaili, 5 are part Sunni and part Ismaili, and 3 wholly Sunni. In another 4 villages in the same districts where *charas* is not cultivated, 2 are wholly Sunni, 1 part Sunni and part Ismaili, and 1 is wholly Ismaili.

In the *charas*-growing villages most cultivators were reported as sowing one field of about 1 acre, and producing from this between 5 and 20 lbs. of the drug. Yields are more susceptible to climatic and other variables than those of grain crops, and the preparation of the drug itself is a skilled and time-consuming process. Some of the output is consumed within the state, but most is sold and exported. The price received by farmers who sold to traders in their own localities in 1963 was approximately Rs. 20 per lb., but a few years previously prices had reached Rs. 70 per lb. Expansion of production over the last five years has coincided with a fall in prices, and it was reported in 1964 that some of the crop still remained unsold at the end of the year.

If the price of wheat in northern Chitral is taken to be Rs. 15 per maund and the average yield is 14-16 maunds per acre, then with an average yield of only 20 lbs. of the drug per acre, when the cultivator's

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50 This is held to account also for the occurrence of wine-making only in Bunza, Punial, the political Districts, and the north and western parts of Chitral.
price per lb. exceeds Rs. 11, the return on charas cultivation is greater, assuming other things are equal. Costs per acre for charas cultivation are in fact considerably higher; following in necessary in alternate years; even with heavy manure inputs charas exhausts the soil with deleterious results for the yields of other crops for several years afterwards; and there are no by-products of straw and chaff for fodder. Nonetheless a price of the order of Rs. 70 per lb. clearly represents a higher rate of return, even taking these other consequences into account.

Most of that which is marketed passes through the main bazaars of the south of the state, where there is a state sales tax of Rs. 5 per lb. If it is exported from the state it is further taxed at the rate of Rs. 11 per lb. 51 As high a proportion as one third of Chitral state revenues are now derived from taxes on charas. To possess the drug south of the Kailash and Agency is illegal, and exports are concealed after being taken into Dir. Some quantity of the drug is also smuggled via the Katchkani pass to the bazaars of the south of Swat state in order to evade the taxes payable, but figures for the latter trade are not available. Chitral officials estimate that approximately 500 mounds of the drug are exported annually on which the export tax is paid, but this figure may be an exaggeration.

Despite its high costs of production, the risks of yield variation, the fluctuations in prices and the difficulties of exporting the drug, charas has come to be an important source of income for many cultivators in northern Chitral. 53 The income, like that from the sale of animal products and from employment, is used primarily to purchase manufactured goods and to make up grain deficiencies.

It has been suggested by several informants that the rapid expansion of charas cultivation has made a considerable contribution

51 These data were provided by the Chitral state revenue authorities. Other informants have reported that there is a single tax of Rs. 15 per lb. payable on the drug at the time of sale by the cultivator to the charas contractor; see alsoRichard Ghaba, unpublished MS.

52 See Nurul Islam Mian, 1956, p. 53.

53 Israr-ud-Din, 1965, p. 147 has described charas as the 'backbone' of Chitral's economy.
to the rising incidence of individual grain deficiencies, and to the overall grain deficiency of the state. They suggest that the availability of imported grain at subsidized prices has encouraged *charr* growing, and that if at some time in the next decade *charr* is officially discouraged (in the same way that cotton cultivation has been discouraged) then some improvement in the grain-supply position might be expected.

Cultivators drew a distinction between *charr*, which they regard as being grown specifically for sale and is planted according to their expectations of future cash returns, and grain and other crops. They stated that even where a saleable surplus of grains, pulses or fruit is produced annually, they do not take the relative prices of these into account when sowing and planting. The suggestion of two differing supply elasticities in response to price is in accordance with Falcon's findings in the West Punjab, where a smaller response in the area sown with home-consumed grains is in contrast to a considerably greater degree of reaction to changes in relative prices for those crops that are sold for the market.

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54 See also Cambridge Chitrali Expedition, n.d., pp.7-9; Israr-ud-Din, 1965, p.147.

55 The only quantitative data available are for wheat and barley as alternative crops in Gilgit. Between 1942 and 1943 the area sown of each remained constant, in relation to the total cultivated area, to within 2%, despite the consistently higher price of wheat. The price differential probably represents the general preference for wheat for consumption, in conjunction with the generally higher yields that are obtained from barley and with the requirements of altitude in some villages, especially where only by growing barley as a first crop is double-cropping possible. (In Gupia village it was reported that there is some increase in the area of barley sown in relation to that of wheat as a result of attempts to raise the upper limit of double-cropping.) Barley has the additional advantage that it ripens earlier in the spring, when grain may be especially scarce. (Data for wheat and barley show that the areas sown with each in Gilgit are 57-59% and 3-10% respectively: data provided at the Tehsil Office, Gilgit.)

The Market in Agricultural Land.

In the acephalous communities the restrictions upon alienation were specific and rigid, but even in the principalities, so far as existing villages were concerned, outsiders or members of groups not locally resident were not normally permitted to acquire land and alienation procedures were, effectively, almost as strict and exclusive. It was normally only through the allocation of land by the state government that outsiders and members of other groups did acquire land, and this by the over-ruling of existing rights, for even barren land was generally subject to proprietary claim by local inhabitants.

Where a centralized government acquires paramount rights to all land, and where landownership becomes more individual and less associated with descent organization, then it becomes more important as a criterion of status within the new system of social hierarchy. Those whose sense of continuity with the past is strong, and who may trace their ancestral occupation of particular plots or estates back for many generations, regard this as part of their claim to high social status. In Chitral, for example, the continued occupation of ancestral land is one of the criteria for membership of the Adznada class. Such individual non-economic returns from the possession of land continue to make for importance, especially among the upper classes, to part with land even where political controls and communal sanctions upon alienation have been relaxed. Herskovits stresses the importance of non-economic elements in the value attached to land, and mentions 'emotional attachment', which was reported by landowners, especially among the upper classes. 57

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57 Herskovits, 1952, p.333. An instance was recorded in Chitral where a member of the ruling family was proposing to repurchase - at any price and for no particular future use - land in a neighboring village that had been ancestral property, had been inherited by two cousins of his, and had been alienated by them. The 'shame' (Footnote 57 continued on p.?)
Added to non-economic restraints upon land alienation is the inevitable economic dependence upon land as the chief source of food production; and it was suggested in several localities that farmers are now less willing to part with their land, even within the possibilities of the traditional alienation procedures, than at times in the past.

Nonetheless within the last few decades there has developed a small market in land in some bazaar localities, notably Gilgit town. The break-down of some of the rationale of traditional political and social organization, and consequently of the conventions concerning land, occurred in Astor and Gilgit a hundred years ago. From that time there have been garrisons, outsiders and Government institutions present in the main settlements of these districts, but it was not until the 1890's that Government activity began in other districts, and then the traditional administration and procedures were mostly allowed to function with only minor alterations.

The importance of the presence of garrisons and Government institutions for the development of a land market was that land was required by them and was taken periodically. The acquisition of land for official purposes has continued through the 20th century, and has probably been taking place at a faster rate since 1947, as a result of the expansion of Government services and the establishment of new departments. This has not only occurred in the administrative centres, and not only in the principalities, but in every village where a school, rest-house or dispensary has been built. For such building purposes, barren or waste land is often acquired, but even then it represents property to which local inhabitants have rights or claims. The taking of land for such purposes, and the compensation given, is often the first demonstration of a transfer of ownership outside the landowning group or the permanent village population: in all the major settlements, the mandatory purchase of land for Government purposes has been a stage that has preceded any tendency towards the disposal of

(continued from p. 236) attached to this situation was regarded as being all the greater because, first, the particular plot of land was associated with certain historical events in the early ascendancy of the Katore family, secondly, the land had been alienated to individuals who had served previous owners as servants, and thirdly, because the proceeds of the alienation had been consumed and had not been spent productively.
were initially encouraged by the Agency administration. These schemes allowed the migration of small numbers from other parts of the Agency, particularly to Gilgit, where permanent rights to barren but irrigable land were allotted to them. Existing local claims and traditional rights to the land were overruled, though even in the longest-established of these settlements there may continue disputes with members of the local land-owning group over the land or over the division of the irrigation water. Such resettlement has done much to encourage physical mobility and to demonstrate the possibility of moving from ancestral villages to other localities when land is made available.

In Gilgit town it is now possible, not only for Burusho and other inhabitants of the Agency to buy land, but also for outsiders such as shopkeepers to do so. Some sales of land in the bazaar are reported to occur without reference to social or political considerations at all. In Chitral town, Drosh and the smaller centres the process of alienation has not gone so far. In Chitral town, although a considerable amount of land in the vicinity of the bazaar has been acquired for official purposes and although there are now no explicit sanctions upon alienation other than those of the Shariat law, it continues to be regarded as shameful for a farmer voluntarily to sell his land to

58 See also Census 1941, XXII, Part III, p. 338.

59 As e.g., at Katun Das, which was abandoned about 1960 after a flood, which no surrounding village would recultivate, and which was given to Bunza Burusho in 1908: Military Report and Gazetteer, 1928, no. 199; Band, n.d., pp. 29-30.

60 A contributory cause is probably the high price of bazaar land in Gilgit: one exceptional sale was reported where the price had been Rs. 16,000 per 1/10 acre, which is four times the highest price reported from Chitral town and twenty times the price of local agricultural land.
Government institutions without first giving the option of purchase to his brothers and kinsmen as under the traditional alienation procedures. Nonetheless a small number of Lakan shopkeepers have recently acquired plots of land in Chitral town, mostly for business and domestic purposes. One or two examples of outsiders who have acquired land were also given by informants for Yasin and Lashkari.

In Kalam, where the process of alienation to outsiders also began recently under an external administration - in this case, the Swat State government - the traditional corporate organization and xenophobia was reasserted after two Pathans had obtained land for their personal use. A deputation of Sawri successfully petitioned the Wali to ban further purchases by outsiders for non-official purposes. In Chitral the success of the small number of Pathans in obtaining land in Chitral town has led to more movement among the local population in favour of some legal barrier to such alienation. These movements, together with a consideration of the circumstances in which outsiders and immigrants have acquired land, support the suggestion that the break-down of traditional political organization and of the corporate unity of local populations is a condition that favours the growth of a market in land. In Bunza, Nager, Dambil, Pandol and east of the Shinaki districts, where traditional organization remains more nearly intact, and where Government institutions are less frequently located, there is no market in land.

Even where a relaxation of restrictions does occur, this in itself does not provide any additional resources or alternative local employment opportunities. Where farmers and landlords have taken full-time non-agricultural employment - in Government service or business - it is invariably for them to continue to own land in their ancestral village and often, if their place of employment is a long distance away, to acquire a holding there also, not only for domestic building, but

61 See Barth, 1956a, p.50.
62 The exception is Shinaki in Chilas, where some labourers have recently acquired land in the villages in which they were resident. In Chilas village some at least of this process was directly initiated by Government officers: Stein, 1928, I, p.12.
also for agriculture. Such a process is seen around Gilgit town, where much of the newly-irrigated land is owned by Government employees who have left their inherited holdings in other districts to be cultivated by relatives or tenants. How far this process represents traditional attitudes, and how far it is based upon present-day economic considerations cannot be shown; certainly the traditional orientation towards individual self-sufficiency continues to be encouraged by the overall regional deficiency of foodgrains and the difficulties and uncertainties of importing the new essential supplies from downcountry. In the spring of 1964 there were temporary difficulties over transport, grain supplies in Gilgit town became very scarce, and the price of wheat rose to Rs. 60 per maund. Those who face difficulty in such circumstances are not only the landless outsiders who are employed in Gilgit town, but also those regional inhabitants who are employed there but whose home localities and farms are at long distances from Gilgit town. It is however not only those regional inhabitants who have moved to Gilgit town for Government service or business who have acquired land there, and it is general changes in the ownership of agricultural land that inhabitants of the region see as indicating a difference in the economic behaviour of certain groups.

The development of a market in land in the bazaars for business and official purposes is seen by informants as a process distinct from the migration of cultivators from one district to another and their acquisition of new agricultural holdings. This second process is occurring in the villages around Gilgit town and in the Kalasha valleys, where Buruaho and Zho are slowly replacing Shina and Kalasha respectively. This is taken as evidence of a greater propensity for cultivation and long-term investment among the Buruaho vis-a-vis the Shina, and of lower levels of economic sophistication among the Shina and Kalasha.

Migration of Buruaho to Gilgit has continued since the officially-sponsored resettlement schemes of earlier decades. At that time the migrants were allotted barren land, and one of the circumstances then taken into account was the ability of the local population to utilize the land proposed for allocation. In several instances the
construction of a channel involved technical difficulties or investment greater than the inhabitants of neighbouring villages were willing or able to make. The success, in this situation, of the burusho in bringing water and starting cultivation has contributed to the belief in their superior channel-building skills and their capacity for co-operative enterprise. One example, mentioned above (p.238a), was at Katun Dam. Another was orshkundan, where the right-holders of bagrot had tried unsuccessfully to construct or reconstruct a channel and the mir of hunza was then offered a share of the land in return for the services of hunzakuts in building the channel. Other villages in Gilgit where burusho were settled were raimav, jutial, sonikut and nomal.

At the time of the official resettlements, the migrants were given barren land only, but they have since both extended irrigation and, more significant, have to a considerable extent replaced Gilgitis, especially shins, as the owners of the original settlements. The process is strikingly illustrated at orshkundan. In 1938 or 1939 when the channel was built, the mir of hunza was given a sixth of the total irrigated area which he rented to 57 burusho households for nominal amounts; the remaining five-sixths of the land was divided among the inhabitants of farful and sulche villages. The average size of holding at that time was nearly two acres. In 1963 there were 260 households in the village, of which 200 were burusho, (although none of the bagrotic had remained domiciled in the bagrot valley). The burusho by then owned or cultivated two-thirds of the irrigated area, and some had increased their holdings to 8 acres; most of the bagrotic had sold their land and returned to the valley, and none who remained had increased his initial 2 acre holding. In raimav, traditionally a shin village, burusho have migrated since 1933 and now form nearly half the population. Similar replacements were reported in other villages after burusho have once acquired land.

The sale of land by shins, it was suggested, is connected with their traditional studies concerning landownership, cultivation and consumption. A specific factor is indebtedness, which was reported to be associated with characteristic practices concerning competitive
It was observed that Shin cultivators do not make long-term improvements to their holdings, even though Burusho techniques are demonstrated in the village, so that Shin and Burusho holdings can generally be distinguished visually in a jointly-occupied village. They also demonstrate a propensity to cut and sell fruit-trees for firewood, a striking illustration of concern with short-term cash requirements. Similar phenomena are reported in the village adjacent to Kolbar, where Tujara were officially settled some years ago and who are now being replaced by Burusho. None of these Shin and others who alienate their land generally take employment as non-agricultural labourers in Gilgit town, or as agricultural labourers for the Burusho and others who have some additional employment in Gilgit town.

The expansion of the use of the ox at the expense of the Kala has been continuing for many decades.5 At the present time indebtedness appears to be frequently involved. Debts are relatively widespread among the Kala in the village, for example, of a random sample of 10 farmers, 7 reported debts amounting to Rs. 160. This tendency towards indebtedness appears to result partly from a reluctance to sell surplus agricultural produce or assets until the debt has accumulated to a point where foreclosure occurs. This mismanagement is also apparently aggravated by the shopkeepers of Besham, Ayun, and Chitral bazaars who advance salt, cotton cloth, iron, and the beads and decorations used by Kala women in credit, and subsequently apply the Islamic injunctions against taking interest less stringently to the Kala. Several very small debts were reported to have been arranged in such a way that within two or three years they had become equal to the value of a field, which had then been taken in payment and is now cultivated by Shah.6

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63 Shina living near Gilgit town are reported to seek prestige by conspicuous and lavish consumption of imported goods, especially tea and cigarettes, and, since the opening of butcher's shops, of meat. One instance from several recorded concerned a Shin farmer who exchanged his rights to 4 acres of barren but irrigable land for 250 cigarettes.

64 See also Thakur Singh, 1917, p.47.

65 Morgenstierne, 1932, pp.47-8.

66 See also Iseran-I-ud-Din, 1965, p.185, who quotes a saying of Chitral: 'A Kala debt is never settled'.
These changes in the ownership of agricultural land are especially significant in relation to differences in investment activity and enterprise as between one group and another, although in relation to the total area of cultivated land in the region they are negligible. Altogether these 20th century developments have had little effect upon the territorial distribution of groups that was characteristic of the 19th century. Away from the bazaar localities, the only changes in landownership that were reported were within the traditional scope for rationalization of holdings and for transfers of rights between brothers and kinsmen.
Economists now generally accept that peasants make economic choices and decisions that are rational and deliberate. The 'dominion of custom and impulse' that was formerly thought to be beyond the economist's consideration is now thought of as the position of an individual vis-a-vis the society and economy that he belongs to. Individuals' decisions have to be considered in relation to the options that they see as being available to them. Societies and communities may have widely varying values and criteria that affect economic organization and influence economic behaviour, but the principle of maximization of satisfaction appears to be universal.

Among a population that is composed of groups sharing a common culture but differing in historical experience and properties, and that is also subdivided into traditionally autonomous political units with territorial limits and each with particular social and economic features, the total range of economic behaviour may be considerable. Such a range is found in Pakistan, notwithstanding the limited choices that individuals have had. The multiplicity of different criteria that are referred to among local populations may have important implications for economic planning and Government activity.

In any objective assessment of the organization and behaviour of different groups and communities, it is necessary to be cautious in applying any measure of achievement. It is not necessarily appropriate to judge by criteria that are used in other situations, and that may not be relevant to Pakistan. Nonetheless it is clear that the agriculture there is specialized and generally organized to make the fullest use of resources. This introduces the possibility that in some districts there may be little more that can be done to raise output and provide for increasing populations unless there is un-economic Government investment. In other districts, especially in Sind and Baluchistan, there are possibilities for raising agricultural output, even with the local technology. As pressure of population rises, increased output will become imperative, and there are already some indications that a new phase of exploitation is beginning.
The preservation of the differences between the principalities and the aphasial communities, and between one group and another should not be overemphasized. As Pakistan's Administration and services, especially education, are brought more closely into contact with all districts, a greater degree of political and social homogeneity will develop. A decline of traditional constraints and of the sanctions concerning the distribution of land in the aphasial communities can be expected, together with an appreciation of new uses for wealth and effort. The taste for imported and manufactured goods can be expected to grow, and also the demand for new and improved services. Improved communications and increased traffic between districts will itself favour homogeneity: much of the present heterogeneity of Pakistan stems from the lack of contact between districts.

Improvements in communications during the 20th century have been crucial in facilitating the changes in consumption and employment, but it is unlikely that any of the roads have been made for solely economic reasons - i.e., on some assessment of cost and return - and it is unlikely that solely economic considerations would lead to others being made in the future. If additional considerations become increasingly important in government activity, then the range of possibilities for increased production, incomes etc. pass beyond the sphere of the present study.

If economic returns do remain a controlling factor, then the long-term possibilities for future agricultural development in Pakistan remain limited. Even when the Indus valley road, at present under construction, is completed, it will be a long and costly journey downcountry from Multan. Any cash crops that are grown for export downcountry must continue to be of high value in relation to bulk. Even with the increased certainty of conveyance and the smaller risk of loss through over-ripening, it is unlikely that fresh fruit from the region will be able to compete in downcountry markets with imports of the same fruits from Afghanistan. Field-crops grown for consumption have the disadvantage of reducing the cultivated area available for food production; the official policy about subsidised imports, which may already encourage cashew-growing, will continue to be an important consideration. Cashew itself is unlikely to be a suitable long-term cash crop for the region, despite its relatively high value in relation to the
costs of transporting it. At the present time maize-growing is permitted only in some districts, and there is already the possibility that it may be altogether forbidden.

In the non-agricultural sector, tourism may be permitted to develop and provide employment for small numbers of local inhabitants. The extraction of minerals and timber may be practicable on an increased scale in some districts, but is again limited by the present difficulties and costs of transport downcountry.

The scarcity of both agricultural and non-agricultural opportunities is illustrated by the dilemma of those regional inhabitants who have saved their earnings and attempted to invest them in trade, but only with limited success. A new tendency, seen in the last few years, is for those who have earned downcountry and saved to invest in downcountry enterprises: several Zico and Durusho now own tea-shops in Lahore and Faisalabad. Such individuals appear to have migrated permanently, with their immediate families, and they return to their home villages only occasionally. With continued employment-seeking and better opportunities downcountry, it is likely that the present pattern of temporary migration will increasingly tend towards permanent migration, and possibly even towards depopulation of the less productive localities of Pakistan. Such a process has occurred in the Alpe within the last 100 years.

Nonetheless, even with migration, the distinctive features of settlement and economy in Pakistan are likely to remain, unless far-reaching technological innovations alter the relationship between the physical environment and agricultural activity.
For the data collected in villages and from cultivators, informal questionnaires were followed, but were adapted and varied according to local circumstances. Questions about villages were usually answered by the laimder or overseer, sometimes by groups of cultivators, but in all cases by people who are involved in some way with agriculture. Data concerned the sizes and tenures of holdings, cropping and the yields and rotation of crops, horticulture and livestock husbandry (in particular, numbers and varieties of fruit-trees and numbers of livestock), the extent of pasture, the possibilities of extending the cultivated area, the efficiency of the villages' production of grain and animal products, the sales and purchases of agricultural produce, non-agricultural employment, and current trends and changes. Villages were chosen for convenience in travelling (see map 9 opposite), but were intended to be representative of the districts visited and of the different groups comprising the region's population.

In five villages the cultivators' names were listed and a 25-30% sample chosen with random numbers. Data were collected from those constituting the sample, in order to check the accuracy of some of the data given for the village as a whole. The results indicated a considerable measure of accuracy in the village data for average size of holdings and for details of cropping, livestock husbandry and horticulture, and non-agricultural employment etc., but data for crop yields were found to be incompatible and cannot
to be used for quantitative comparisons. The degree of correspondence in some of the quantitative data is indicated below.

<table>
<thead>
<tr>
<th>Village</th>
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<td>average of sample</td>
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<table>
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The data collected from cultivators was also to supplement the agricultural data for villages, to give an opportunity of answering questions about personal economic circumstances, and to provide data for more specific matters such as size of households and family structure, education, changes in economic circumstances, investment. Detailed questions of cultivators were planned for subsequent field-work, when particular attention was to have been paid to individual deficiencies of grain production, the size of holdings and of crop yields, and trends towards agricultural wage-earning. It was also intended to study settlements of particular groups within the territories of other groups, with a view to discovering how far their generally characteristic features are retained.
Following the change in the scope of the research project, qualitative information concerning such topics as social organization and the system of distribution of resources became increasingly important. That collected represents long discussion and careful exposition by educated informants, most of whom are farmers (and a few, cultivators), and several of whom are familiar with large parts of the region.
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1931: *Military report and gazetteer, 1929.*
1931: *Census 1941, XLI, Part II, pp. 1-7.*
3: Data provided at the ministry of Kashmir Affairs, Srinagar.
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لا يمكنني قراءة النص العربي من الصورة المقدمة. يرجى تقديم نسخة منcord الطلب من اللغة الإنجليزية أوخرى.