

**SOCIO-GEOGRAPHICAL STUDY OF
HUSSAINI VILLAGE, GOJAL
(UPPER HUNZA)**



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**DEPARTMENT OF GEOGRAPHY
URBAN & REGIONAL PLANNING
UNIVERSITY OF PESHAWAR**

SESSION 1999 - 2000

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the best name of Allah, Almighty, the most Beneficent, and the most Merciful.

And use split the earth in fragments and produce there corn, and grapes and nutrition plants,

And olives and dates and enclosed gardens dense with lofty trees.

And fruits and fodder, for use and convenience to and your cattle.

(Al-Quran, Sura Abbas 80, Ayat 25-32)

DEDICATION

**I dedicated this humble effort
To my loving parents and my
Kind Uncle Ghulam Ibrahim,
Who always inspired me for
Greater achievements in life
and supported spiritually and
financially to score this stage.**

DEPARTMENT OF GEOGRAPHY



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I hope this report will be of interest for those students, who work on Hussaini in future, it helps them in comparison study.

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ABBREVIATIONS AND ACRONYMS

AKCSP	Aga Khan Cultural Service Pakistan
AKESP	Aga Khan Education Service Pakistan
AKRSP	Aga Khan Rural Support Program
AKDN	Aga Khan Development Network
AKF	Aga Khan Foundation
CBO	Community Based Organization
IUCN	International Union for the Conservation of Nature & Natural Resources
KKH	Karakoram Highway
HSWO	Hussaini Social Welfare Organization
NA	Northern Areas
NATCO	Northern Areas Transport Corporation
NGO	Non Governmental organization
VO	Village Organization
WO	Women Organization
WWF	World Wildlife Fund

EXPLANATIONS

Down Country:	synonym for plains of Pakistan (the Punjab, Sind)
Hunzukuts:	inhabitant of Hunza
Sisunik	inhabitant of Hussaini
Ktor	Tribe/clan

CHAPTER - 1

NORTHERN AREAS OF PAKISTAN

1.1 INTRODUCTION

The Karakoram region, popularly known as the Northern Areas of Pakistan is an important strategic out post of Pakistan with presence of the soviets, Chines and Indians around, covering about 72,500 square kilometers in the north of Pakistan. The Northern Areas is the home of million people of different ethnic backgrounds, cultures and languages. With some of the highest mountains in the world, it is an alpine region with a wide variety of climatic conditions, resulting in a diversity of plants, animals, and habitats. Two third of its people practice subsistence agriculture, with maize or wheat as the staple crop of the areas depending on the climate. With the construction of the Karakoram Highway in the 1970s, Centuries of isolation came to an end with rapid social and ecological transformation in their wake. The Karakoram Range has an average height of 6000 meters above the sea level. This is also the glaciated area in the world. It contains some of the world's longest glaciers, such as the Siachen glacier. It is said to be the highest battlefield in the world. The other glaciers include Baltoro, Godwin, Austun, Batura, Biafo and Hisper. The Karakoram is extremely inaccessible. Mountain passes situated at various altitudes are only open for five to six months at the year, during the summer. Since, 1954 when the Karakoram Range of Pakistan was opened up to expeditions, for mountaineering and later for tracking, The mountains and glaciers of the North have become international known. The population of the area is small and scattered(888000-1998). The favorite sport in the Northern Area o f Pakistan is Polo. It draws a large number of visitors and participants on the festive occasion of the polo tournament in November every year. Many tourists visit the Northern Areas of Pakistan to view its scenic beauty.

Table No. 1**MAJOR GLACIERS IN NORTHERN AREAS OF PAKISTAN**

S. No.	Name of Glaciers	Length in Km	Average Width Km	Altitude in Meter	Direction of Movement	Loc./nearest Village
1	Siachin	75	3.2	3703	N.W to S.W	Skardu
2	Hisper	60	4.0	3200	E to W	Skardu
3	Baltoro	59	-	3535	E to W	Skardu
4	Batura	57	2.5	2450	N.E to S.W	Hunza
5	Biafo	50	2.5	3180	N.W to S.E	Skardu
6	Rimo	47	3.0	4900	N.W to S.E	Skardu
7	Virjarav	40	2.0	3452	N.E to N.W	Shimshal
8	Baraldu	32	1.6	3252	S to N	Shimshal
9	Chogolugma	29	2.1	2924	N.W to S.E	Skardu
10	Barpu	28	2.5	-	S.E to N.W	Nager
11	Yazghil	27	1.0	32260	S.E to N.W	Shimshal
12	Khurdopin	25	1.5	3543	S to N	Shimshal
13	Yashkukyaz	23	-	-	S to N	Hunza
14	Yengunta	22	-	-	-	Skardu
15	Momhil	22	0.6	3650	S to N	Shimshal
16	Passu	21	0.8	2543	W to E	Passu
17	Muchiohul	20	0.8	-	N.W to S.E	Hunza
18	Ghasera	20	1.0	-	E to W	Nager
20	Godwin A	19	1.6	4720	N to S	Skardu
21	Mulungudi	18	1.0	-	S to N	Shimshal
22	Hussaini(Ghulkin)	18	0.5	2438	N .W to S.E	Hussaini
23	Buctar	17	0.6	-	S to N	Nager
24	Rimos	17	2.5	4900	E to W	Skardu
25	Minapin	16	1.0	-	S.E to N.W	Nager

Source: Souvenir Department of Geography 1983

1.2 KARAKORAM HIGHWAY

The Karakoram Highway, or KKH, is the greatest wonder of modern Pakistan and one of the most spectacular roads in the world. Connecting Pakistan to China, it twists through three great mountain ranges - the Himalayas, Karakoram and Pamir is the following one of the ancient silk routes along the valleys of the Indus, Gilgit and Hunza rivers to the Chinese border at the Khunzhrav Pass. It then crosses the high Central Asian plateau before winding down through the Pamir to Kashgar, at the western edge of the Taklamakan Desert. By this route, Chinese silks, ceramics, lacquer-work, bronze, iron, fur and spices Traveled west, while the wool, linen, ivory, gold, silver, precious and semi-precious stones, asbestos and glass of South Asia and the west traveled East.

For much of its 1,284 km (905 miles), the Karakoram Highway is overshadowed by towering, barren mountains, a High altitude desert enjoying less than 100 millimeters (four inches) of rain a year. In many of the gorges through which it Passes, it rides a shelf cut into a sheer cliff face as high as 500 meters (1,600 feet) above the river. The KKH has opened up Remote villages where little has changed in hundreds of years, where farmers irrigate tiny terraces to grow small patches of Wheat, barely or maize that stand out like emeralds against the Grey, stony mountains.

Table No. 2 HIGHEST PEAKS IN THE NORTHERN AREAS

S. No	Peaks	Altitude M	W. Rating
1	K2	8611	2 nd
2	Nanga Parbat	8126	8 th
3	Gasharbrum I	8068	11 th
4	Broad Peak	8047	12 th
5	Gasharbrum II	8035	14 th
6	Gasharbrum II	7952	15 th
7	Gasharbrum IV	7925	16 th
8	Distaghil Sar	7884	20 th
9	Kunyan Kish	7852	22 nd
10	Masherbrum	7821	24 th
11	North Peak	7809	-
12	Mashebrum W	7806	-
13	Raka Poshi	7788	27 th
14	Batura I	7785	28 th
15	Kanjuz Sar	7760	29 th
16	Bride Peak	7654	-
17	Shisper	7619	35 th

Source: souvenir Department of Geography 1983

The highway is an incredible feat of Engineering and enduring monuments to the 810 Pakistanis and y reckless rate of five centimeters (two inches) a year and the mountains are still growing by about seven millimeters (1/4 of an inch), annually. The KKH runs through the middle of this collision belt, where there is an earth tremor, on average, every three minutes. Karakoram is Turkish for crumbling rock, an apt description for the giant, gray, snow-capped slagheaps that tower above the gorges cut between them. The Indus River flows northwest, dividing the Himalayas from the Karakoram, before being knocked south by the Hindukush. The KKH hugs the banks of the Indus for 310 kilometers of its climb north, winding around the foot of Nanaga Parbat, the ninth highest mountain in the world and the western anchor of the Himalayas. The highway then leaves the Indus for the Gilgit, Hunza and Khunzhrav rivers to take on the Karakoram Range, which boat 12 of the 30 highest mountains in the world. By the time the road reaches the 4,733 meters (15,528-foot). Khunzhrav Pass, it has earned the name of the highest metalled border crossing in the world.

The mountain area of Pakistan is a paradise not only for mountaineers and trakers but also for every- nature lover and particularly for those interested in anthropology and archaeology. The Karakoram highway, an extraordinary accomplishment of ancient dreams may be a wonder of the present age. But to the neighbors of Pakistan and China, the route merely highlights strategic link. However, the highway has heralded a new era for the northern areas of Pakistan. It has opened the door to easier and increasing co-operation between the two countries. The present highway, in fact, began as a pioneering venture of the Pakistan army engineers in 1959 when work started on what was known as the Indus valley road. After the 1965 war with India, Pakistan concluded an agreement to extend the road to the chinse border. In 1967, it was decided to transform the road into an all-weather and dual-carriage highway over the Karakoram, along the ancient Silk Route. After being exposed to untold hardships against the natural barriers and rugged mountain terrain, 10,000 Chines and 15,000 Pakistani engineers and army jawans completed the road in 1969. With certain improvements, the highway was finally inaugurated in June 1978. One

could very well imagine the economic cost but the human cost was also staggering, in the process of exploding mountain barriers and constructing 80 bridges almost 300 Pakistani and 160 Chinese laid their lives. Many suffered severe injuries. On one occasion, 25 Chinese engineers were killed in a landslide near Komila in 1976.

The highway has made it possible to realize the vast scope of expansion in the export of cotton, cotton textiles and other articles to China and the import of Coal, Cement, Iron, Glassware, Cutlery, Chemicals and Silk yarns to Pakistan. Indeed, this has accelerated the tempo of trade between the two countries to a level not achieved before in recent history. With modern transport facilities, it is estimated that vehicles carrying goods from Karachi could reach China's border within 15-20 days. Pakistan could also benefit immensely, if sites along the highway are explored with a view to developing tourists especially from the Western Europe visit the northern areas of Pakistan. The beautiful and scenic ranges of Pamirs, Himalayas, and the Hindu Kush bound this area. From both Chinese and Pakistan, perspectives, the road is very important for trade and military matters. In the current strategic jargon, the highway is termed a Chinese window opening towards the southern Asia. For Pakistan, it has been very convenient in shifting light military weapons from China. At present, Although the northern areas of Pakistan are fast changing both economically and socially but their constitutional status with Pakistan remains unchanged, and indeed present a puzzle for most of the people. Such a constitutional crisis does agitate and frustrate the minds of local inhabitants as well. Factually the area is under the bureaucratic control of Azad Kashmir Affairs and Northern Areas, but politically it is deprived of the rights, which Azad Kashmir enjoys.

Nanga Parbat (necked Mountain) situated on the western edge of the great Himalayan range is the second highest peak of Pakistan and 3rd in the world. This mountain is 8125 meters (26660) feet high and was originally known as Diamir the abode of god. Many believed that the queen of Siamer lived in a castle of glass stone on the peak and any one who dared to disturb its show on the slopes was finished by fairies living at the top. Nanga Parbat is also known as killer

mountain, After repeated attempts and colossal loss of human lives the peak was scaled by the Germans on July 3,1953. Nana Parrot has taken the biggest toll of human lives in the annals of mountaineering, which are nearly 60 by now. Rakaposhi (the goodness of snow) a beautiful and majestic mountain is in Nager valley rising to a height of 7790 meters (25558 feet). Rakaposhi became an object of attraction for mountaineers far as 1892 when Lord Conway visited the area for finding out the possibility of climbing its peak.

Table No. 3

HEIGHEST PASSES OF THE NORTHERN PAKISTAN

S. No.	Passes	Altitude (Feet)	Location/links
1	Kilik	25,600	On the main Sino-Pak Bordary
2	Mustagh	19,029	Link b/w Baltoro & Mustagh
3	Obrang	17,200	Link b/w Pak & China
4	Irshud	16,160	Near Sino-Pak Border
5	Khunzrav	16,100	Border b/w Pak & China
6	Shimshal	15542	Mustagh Mountains
7	Mintika	15,460	On the main Sino-Pak Bordary

Source: Tracker Guide to Hunza (Haqiqat Ali)

1.3 HUNZA VALLEY

Hunza valley is situated in the Northwest of Pakistan. In the north Afghanistan and China border the region. Hunza is a subdivision of the Gilgit District within the Northern Areas. The size of the Hunza territory is 11,695 Km (above one quarter of Switzerland)*. Approximately 46,500 people live in the main-valley. 95% of people living in Hunza valley and 100% in Upper Hunza belong to Ismailism with The His Highness Prince Karim Aga Khan as a spiritual leader. 5% are members of Shia Imami (12er) and are concentrated in the village Ganesh and surrounding settlements. After the abolition of the principle state the Aga Khan Development Network (AKDN) started operation. The achievements obtained so far range from a high education level, institutional development and modernization of agriculture to the construction of infrastructure facilities.

1.4 HISTORICAL BACKGROUND OF HUNZA

In the early 1600s the valley was divided in two independent kingdoms, Hunza and Nager. Hunza, which lies on the branch of the Silk Road from Kashgar to Kashmir, was linked to Turkistan/western China for centuries. Therefore, there existed various forms of economical and political interactions ranging from trade, raids of Carwans and military excursion to the annexation of areas within Chines territory. In 19th century Hunza become strategically important as a playground in the "Great Game"- the race between Russia and the British Empire to gain control over the passes leading southwards to British India. In 1819 the troops of British India conquered Nager and Hunza after a fierce battle. Following the so-called "pacification" of two kingdoms, the British placed a younger brother of the Mir (who failed to Kashger after the defeat) on the throne and practiced indirect rule until 1947. Mir Nazim Khan ruled from 1892 until 1938 as an absolute monarch backed by British, who established his headquarter in Gilgit. The Mir administered the area, maintained law and order, collected revenues and

(Ottacher, Friedbert 8): The Impact of Tourism on the Regional Development in Hunza/Northern Pakistan (M.A Thesis), 1998, p.7.

organized production. In 1947 Gilgit Scout, an army unit that was established under the British and consisted of soldiers from the various principal states of the areas, defeated the force of Kashmir. Formally Hunza remained independent, but the kingdom stayed under the influenced and control of the newly established Islamic Republic of Pakistan. In 1974, under the rule of Prime Minister Z. Ali Bhuto, the Mirdom was abolished and Hunza become a subdivision of the Northern Area. The last Mir (Jamal Khan) and his family were retired and the government tried to establish administrative structure in the valley. The abolition of the traditional institutions left a gap that was partly filled by institutions established projects of the Aga Khan Development Net Work (AKDN), which started operation in 1979. In 1978 the Karakoram Highway was completed and the formally secluded valley become linked to China and the plains of Pakistan. Hunza valley is the home of former kingdom named Hunza and Nagger; both are now integrated in the Islamic republic of Pakistan. Consequently every village has its own tribal structure. Hunza valley itself is divided into three main parts, Where people speak different languages: Shina is spoken in lower Hunza, Brushawski in central Hunza, and Wakhi is spoken in Upper Hunza.

Table No. 4

EVENTS THAT HAVE SHAPED HUNZA IN THE PAST 100 YEARS

1891.	Pacification of Hunza by British –Kashmiri troops
1891.	Begin of Mir Nazim Khan's rule.
1947.	Independence war after the withdrawal of the British, Hunza opted for Pakistan.
1953.	First article in the national geographic about Hunza.
1960.	The first visit of Prince Karim Aga Khan in Northern Areas.
1964.	Pakistan army starts construction of the KKH.
1972.	KKH opens to local use.
1974.	Abolition of Mirdom.
1982.	Aga Khan Rural Support Program starts operation
1986	China opens frontier for international tourists
1994	Elections to the Northern Areas Council, defeat of Mr. Ghazanfar Ali
1996	Visit of Aga Khan and President of Pakistan, inauguration of the renovated Baltit Fort (Karimabad Hunza).

Source: A.H. Dani, 1989, p. 310,390, 422, own survey, 1999

1.5 UPPER HUNZA (GOJAL)

Upper Hunza is quite different as compared to lower and central Hunza .The people living here are Wakhis, an ethnic group staying in the mountainous areas of the Karakoram and the Pamirs in the boarder land of Pakistan, China and Afghanistan. The language and culture distinguish them from Brush and Shina speaking people, who live in central and lower Hunza. The landscape is different as well. The valley becomes narrow and is framed by steep slopes. Huge glaciers like the Passu, Hussaini and Batura glaciers reach the KKH. Tourists visiting Gojal is mostly adventure tourists. They go hiking and tracking among the famous peaks and glaciers located here.

1.6 INTRODUCTION TO THE STUDY AREA

Hussaini Village is situated in Hunza valley, 145 km North of Gilgit and 45 km from Aliabad in Central Hunza. Hunza River flows in to the east while the Karakoram Highway (KKH) passes to its west

1.7 LOCATION

Hussaini Village is situated on 74⁰.54 and 03" East longitude to 36⁰.26' and 53" North latitude at an altitude of 2556 meters (Source - GPS) above sea level. South of Hussaini is Gulmit (the headquarters of Gojal magistracy - tehsil), Ghulkin is to the southwest, while Passu is in the north with famous Batura glacier. Hussaini glacier is located to the west with famous Shisper peak, 7611 meters.

1.8 HISTORICAL BACKGROUND OF HUSSAINI VILLAGE

Hussaini is a small village of Gojal (Upper Hunza) in the Northern Areas of Pakistan. It is situated on the both banks of Hunza River. The old main village is on the western-bank and at the lateral moraine of Hussaini glacier and below Borith Lake. The newly irrigated land, called Zarabod, is on the left bank. The total population is 545 souls, living in 75 households.

There is no written history of the village. The history of the village can only be traced in the old folk stories and events, orally transferred from one generation to another. According to the known history, Hussaini has been settled twice. The people, who first settled here, were called Ghosanos. The origin of the Ghosano is not exactly known, however, some people say that these people were the descendents of the Warshighoom State, called Mehtarjaos (the princes but not legitimate to share in the governance)¹.

Ghosanos had a very close working and family relation with the neighbouring village called Passu; almost all the ceremonies like marriage and festivals were celebrated together. The people from Passu were, and still, called Paswik and from Ghusani were called Ghusano. Once, Paswiks were invited in a party by Ghsanos, but due to the unknown causes, they quarreled with each other in the

¹ Interview from an old respondent, Daulat Qadam of Hussaini village, by Mr. Aman ullah who is presently working in the Aga Khan Education Service, Northern Areas of Pakistan - in his diary.

party. Most of Ghusanos were killed in the village. Some of them ran away downstream with the Hunza River. They were chased by Passuweks up-till Gilgit. Sirang Momad (Muhammad) and his son Sirang Qmut were Paswik heroes who followed the Ghusanos down to Gilgit. Raja of Gilgit arrested Sirang Momad and his son Sirang Qmut and gave shelter to Gusanos. The people from Ghosani left the village, and the ruler of Gilgit settled them some where around Gilgit.

Now the land of Hussaini was waiting for the new comers. A prince named Musofir ran away with his brother Majower from Ptukh Wakhan (presently in Afghanistan) due to tug of war in contest for throne of the state. Their elder brother was crown prince. He was unhappy with his brothers due to his position. The younger brothers were always scared of the elder brother because he could kill them to save his throne. One day both of the brothers left the sate and Majower escaped to Ishkomen valley (Presently in the Ghizer district of the Northern Areas), and Musofir came to Hussaini and settled there^{*}.

ZARABOD

As it has been mentioned that Hussaini consists of two localities, the old settlement and the newly irrigated area called Zarabod. Zarabod is a Persian word: Zar means gold while abod means cultivated land. Thus, Zarabod formed by the combination of Zar and Abod. Why has it been named as Zarabod? The people of the village narrate that one of the princes of the former Hunza State, named as Bakhtawar (Baxtawor), was brought-up by a Sisunik (an inhabitant of Hussaini). Bakhtawar was the then Crown Prince who was killed by his brother Abdulla Khan. Therefore, the Hussaini people boycotted with Mir (ruler) of Hunza because of this killing. At that time, the people of Hussaini were strong enough in terms of fighting and wealth; and, therefore, the ruler of Hunza was scared of any revolt from these people. The Mir sent message through a messenger that he would accept all demands if these people would compromise with him. Now, the ball was in the Sisuniks court. They took two plates of gold with them to Mir and demanded for Zarabod. Mir excepted the gold and handed over Zarabod to the

⁽ It should be noted, as mentioned earlier as well, that there is no written record about the entire areas and this much data have been collected through an interview from an old respondent, late Daulat Qadam.

people of Hussaini. And, thus, Zarabod got its conception in this manner, and was cultivated.

BORITH

Borith is a hamlet and situated in the surroundings of the Borith Lake and to the northwest of Hussaini. The altitude of Borith is roughly 8500 feet above sea level. According to the people of Hussaini, the people of Hussaini used this land as winter grazing land. But these days, there are some disputes over this land between the peoples of Hussaini and Ghulkin.

According to the elders of Hussaini, a clan of Ghulkin requested Mir Jamal Khan, the last ruler of former Princely State of Hunza, to permit the aforementioned clan to cultivate the land. Mir did so along with an agreement that these people will grow the crops only and would not plant any tree and will not use the land for winter grazing, as this is the legitimate pastoral land of the Hussaini people. However, with the passage of time the people from Ghulkin started planting trees there to occupy the land. Anyhow, the winter grassing right still remains with the Hussaini people^ψ.

In contrast, the community from Ghulkin does argue on the other way round. This problem, however, needs a rational investigation to know about the disputes between the two neighbouring villages so that to have a consensus on their actual issue.

SELECTION OF STUDY AREA

Hussaini was selected for the study keeping in view the following points:

- To carryout the socio- economic survey of this village, as no previous study of socio-economic and geographical nature existed about the area.
- The village is easily accessible, as it is on the KKH and because of the road, tremendous changes have occurred in the area, that I wanted to study.

^ψ Interview from Mr. Bazik Bhai s/o Daulat Qadam etal, elders of Hussaini, age above 80, 1999.

1.10 AIMS AND OBJECTIVES OF THE STUDY AREA

The study was conducted with the following objectives:

- To find out the socio-economic and physical condition of the village;
- To know the demographic pattern and education level of the study area;
- To see the housing condition, pattern, amenities, and layout of the village;
- . To find out the problems of the study area and give suitable suggestion for their solution;
- To find out way and means for future development of the village.

1.11 METHODOLOGY

The following methodology was adopted for the study area:

The study is mainly based on the fieldwork and observations. However the secondary data has been obtained from different sources.

1.11.1 PRIMARY DATA

Field survey

Data about the different aspects of the village was collected in the field through questionnaires and interviews. In the field survey, I went door to door for collection the different kinds of data, as:

- Housing pattern of the village
- Housing amenities
- Household size
- Economic condition
- Demographic pattern
- Education
- Needs and problems

1.11.2 SECONDARY DATA

- Secondary data was obtained from the following sources:
- Population census reports of Gilgit district.
- Meteorological office of Gilgit
- The Aga Khan Rural Support Program (AKRSP) head-office Gilgit
- The Aga Khan Education Service Pakistan (AKESP) Gilgit
Office Ismailia Local Council for Gulmit Gojal.

1.11.3 PROCESSING OF DATA

The data was tabulated, analysed and represented in form of cartographic/statistical diagrams and maps.

1.11.4 INTERPRETATION

The diagrams, graphs, maps and tables were interpreted in the light of physical and cultural factors.

Chapter-2

PHYSICAL SETTING

2.1 PHYSIOGRAPHY

Hussaini is located in the center of the Karakoram Range, surrounded by high mountains having the heights of more than 7000 meters. Most of the peaks, remain snow covered throughout the year. Shishper (7611 m) is the highest peak of the study area. The rock exposed in the area is mainly Slate i.e. metamorphic.

2.2 GLACIERS

There are two important glaciers in the study area: (a) Hussaini glacier, and (b) Zarabod glacier.

a) HUSSAINI GLACIER (Sisuni Yaz)

The glacier is situated in the west of the village and moves from northeast to southwest towards KKH and Hunza River.

It is approximately 17.5 km long with a headwall at up to 5950 m between two peaks that rise to 7331 m and 7613 m. The glacier descends from 5500 m with a mean slope of 14.6%. Its terminus in 1980 was separated into two parts, a northern tongue and an irregular southern margin, which could be further sub-divided into two small lobes separated a melt water portal. It appears to have this general form since at least 1996. However, its heavily crevassed snout and numerous small caves testify to large-scale melt water production. These melt water flows frequently change in volume and exit position. The changing pattern of debris production and redistribution on the steeply sloping out wash cone pose a major hazard to the Karakoram highway and a 200 m. section of road was actually destroyed by these means during August 1980.

The main valley section of the glacier is enclosed between steep high moraines, the black debris-laden ice smothered by large quantities of superficial moraine. Ogives and rock fall crevasse pattern are well developed, and there are extremely steep icefalls towards the head. The twin lobes of the snout appear to have an

extension in the ice topography for several km up the glacier, the two ice ridges being separated by the pronounced central depression.

The recent history of the glacier is poorly known since most visitors have merely confined themselves to discussing the difficulties of crossing the out wash spreads and only give crude estimates of the distance of the snout from the Hunza river. Although the precise pattern of movement is unknown, reliable records do exist which indicates that the snout position has fluctuated by 625 m during the period 1885-1980, with a notable advance between 1913 and 1925 and a further small advance between 1966 and 1978. This again repeats the general pattern observed for the Minapin and Hasanabad glacier, although the advance early in this century appears to lag by some ten to fifteen years. It is significant that the minor advance of the early 1970s appears on all three records. The movements, therefore, appear to be periodic but in this case there is no overall secular retreat. There has been no record of blocking of the Hunza river and no evidence either of massive retreat. Instead, the snout seems to have experienced limited oscillation around its present position⁷.

According to this field survey, the distance between the snout and the KKH is 301 meters (990 feet)⁸. It is advancing for last many years. It can be predicted that if the same situation remains in future, it may be reach at KKH within between 10 to 15 years.

It is the only source of water supply for irrigation and also for drinking in summer season. The whole village is depending on this glacier, locally known as "Sisuni Yaz", but with an error or otherwise, this glacier is shown and advertised on the maps by Ghulkin glacier.

b) ZARABOD GLACIER

It is a small glacier between Zarabod and Khuramabod. Though it is not a glacier in geomorphic term rather is a depression called cirque. The stream originated from that glacier irrigates the land of Zarabod. This stream is shared between

⁷ Meller, K. J. The International Karakoram Project, (volume-2),1984, p. 439.

⁸ Own survey on September 3, 2000.

Zarabod (Hussaini) and Khuramabd (Passu). Zarabod, and Khuramabod share the stream water on alternate day.

2.3 RIVER

The rivers of the valleys of Khunzhrav (Khunjarab), Misgar, Chipursan, and Shimshal which include the water of various famous glaciers Batura, Verzhrav, Khurdopin, Yazghel, Passu, Hussaini and Gulmit passing through Central Hunza and Nagar to Gilgit. Thus, this river is named as the Hunza River that flows from the north to the south.

2.4 TERRACES

a. HUSSAINI

Hussaini is located on a glacial landform e.g., lateral moraine, formed by Hussaini glacier. The moraine is exposed of huge boulders, gravel, pebbles, and sandy soil with a gentle slope.

Hussaini spreads upward from the bank of the Hunza River and reaches up to a considerable elevation along the lateral moraine of Hussaini glacier. In the south the snout of glacier and the glacial stream separates Hussaini from Ghulkin. In the northern part, the boundary of Hussaini, it ends at Rukhn kor with Passu.

According to the folklore, Hussaini was a big village of Gojal, but unfortunately Shimshal flood eroded it many times in early 1960s. It is said that the distance between Hussaini and Zarabod was very close, people used to throw stone to Zarabod by their left hands (about 60 meter), but now, according to this field survey the distance between these two villages (Hussaini & Zarabod) is 1 kilometer. Shimshal flood occurred periodically every twenty years, the last flood, which was very disastrous, came in 1960 and continued up-to 1963. This flood happened as a result of glacial hazard. Two glaciers merged Khurdopin and Yazghel with each other and blocked the stream of other glacier (Verzhav), which made a big dam and when it was opened, it eroded a large area of Passu, Hussaini, and Gulmit.

b. ZARABOD

Zarabod is located to the east of Hussaini at the eastern-bank of Hunza River. It is an alluvial fan, formed by Zarabod-Khuramobod stream. It also has a gentle

slope. It starts from the eastern bank of Hunza River and goes up slowly and gradually and reaches at the foot of Zarabod glacier, which is locally called as “Zwor”. The stream has naturally separated Zarabod from Khuramobod (Passu).

Chramn is the old settlement of Zarabod, where inhabitants of Hussaini live together in a local house. From this place they used to go their fields to work.

Zarabod has the following areas with different local names, *Shah Khunzo, Qash Sar, Ben, Chramn, Put Dasht, Yinaghn, Hussneben, and Dasht*.

Dasht means barren land, which is located to the north of Zarabod. The government magistracy (tehseel) and the Aga Khan Arbitration and Reconciliation board for the concerned region divided this barren land (Dasht) among the villagers in May 1998: this division of land was 23 kanal per households -numbering 72.

Zarabod has no jeep-able road, and it has connected with Hussaini through a suspension bridge (635 feet) called “Duet”, constructed in 1970. Both Zarabod and Suspension Bridge are too attractive in tourism perspective.

1.5 HOT SPRING

Nature has gifted a hot spring to this village, which springs out at the left bank of Hunza River. According to laboratory test, the water is drinkable. It has been using for bath, when the volume of water in Hunza River becomes less and the level down from the spring source in winter season, but the area is covered by river in summer.

2.6 CLIMATE

The average weather condition of a sizable area of the Earth's surface over a period of time is called climate[†]. Weather is the atmospheric conditions prevailing at a specific time over a short period, from hour to hour, or from day to day.

The climate in Hussaini can be divided into four seasons, i.e. winter, spring, summer, and autumn season.

2.6.1 WINTER SEASON

The winter is cold and chilly. It starts from 15th November and remains up to the end of March. From December up-to the end of February the temperature remains

[†] Buchanan, R.O: An Illustrated Dictionary of Geography, FEP International Pvt.Ltd., 1983, pp.43, 237. s

below 0⁰C. In winter Hussaini is sometimes covered with snow. Due to nearness of the glaciers, it has been noted, it receives much snowfall as compared to other neighbor villages. An annual average snowfall is 8 to 10 inches, but in January 2000, the snowfall was 14"(own survey in 2000), which is unusual for the last so many years. The snowfall is due to the western depression. Human activities become limited in this season. The people have to confine themselves to indoor activities: for example, cottage industry.

During these months the villagers also become busy in performing marriage ceremonies. The other activities for male are hunting, making Hunzai caps, Hunzai carpet called "*Plos*". Female folk weave and spin. They make caps table-clothes and handkerchiefs. They also make gloves, *Chogha* (cloak), mufflers, socks and many other items.

2.6.2 SPRING SEASON

It starts from April to the end of May. A considerable amount of rain is obtained in spring. All the fruit trees like apple, apricots, pears etc blossom in this season. Agricultural activities are practiced in this season, e.g., wheat is sown, and potatoes are also grown in this season. Almost all sort of plantation is carried out during this season.

2.6.3 SUMMER SEASON

Three months, from June to August, is the summer season. These are the driest months of the year. The average temperature is low as compared to the plains of the country. These are also the busiest months for the people. All sort of agricultural activities, e.g., harvesting, and threshing of wheat, pasturing of cattle and drying process of apricots etc. is carried out in these months.

2.6.4 AUTUMN SEASON

From 1st September up-to 15th November is the autumn months. Rain is also received this season. Fodder for cattle and firewood is stored.

2.7 SOIL

Soil in Hussaini is fertile sandy, and loamy on terraced fields. On the steep slopes, it is easily washed down by torrential rainfall, mass wasting and erosion, is the common geomorphic process in the area.

2.8 VEGETATION

Climatic conditions and soil types determine vegetation comprises forests, shrubs, and grasses. The climate is dry for forest. Soil formation on the hill slopes is a necessary condition for vegetation growth. But because of human practices in this area, the soil is being eroded rather than of soil development. There are two main types of forest, irrigated and un-irrigated or natural forest.

2.8.1 IRRIGATED PLANTED FOREST

This very important forest comprising of different species, e.g., apricot, walnut, almonds, grapes, pear, peaches, apple, poplar etc. Poplar trees are mainly used as a timber and firewood. Mulberry and walnut trees are used for high quality furniture. In accordance with this survey in Hussaini, every household has 30 to 500 (mostly fruit) trees, because the villagers have common tradition of planting forest.

2.8.2 UN-IRRIGATED FOREST

This forest is found on the hill slopes in isolated patches. It supplies firewood to the villagers. Important species on the upper most reaches of the village are juniper, salix, epheda, with flexible and adopted to snow pressure. Berry fruits are also found.

Most upper reaches of the mountains have betula nana, salix, juniper, ephedra, viburnum, loniera and ribber.

Borit-e- Ruy, Ishkor Sar, Ghaypar, Zarabod Roy and Batura are the main patches of these species. The main patches of natural forest and grazing points in Batura South are *Jang-e-Kerch*, *Stugh Dhur*, *Baj Yarz* and *Nawgarch*.

CHAPTER - 3

CULTURAL PATTERN

3.1 DEMOGRAPHY

Demography contains two Greek words, demo means “people” and graph means description: thus, demography means the study of the number of people in a certain area. According to the United Nations multilingual Demographic Dictionary “demography is the scientific study of human population primarily with respect to their size, their structure and their development”.

3.2 POPULATION GROWTH

Hussaini is one of the settled areas of Gojal in Hunza Valley. According to the census of 1981, the population inhabited by 310 individuals including 152 male and 158 female.

According to this field survey in August 2000 the total number of households were 75, comprising the total population of 545 souls. It consists of 278 male and 267 female, which shows an increase of 75.8 % and annual growth rate 3.9 % per year.

Table No.5 POPULATION OF HUSSAINI VILLAGE

Year	Male	Female	Total Population	Annual Growth rate	Intercensal Growth rate
1981	152	158	310	--	--
2000	278	267	545	3.9 %	75.8 %

Source: Field Survey 1999 & Census Report 1981

Formulas

The formulas used for the calculation of annual and inter-censal growth rate and for population projection are given below:

$$\text{Inter censal growth} = \frac{\text{new} - \text{old} \times 100}{\text{old}}$$

$$\text{Annual Growth Rate} = \frac{\text{New} - \text{Old} \times 100}{\text{Old}} = \underline{\quad ? \quad}$$

Old no. of years

Population Projection

$$\text{Total Population 2010} = \frac{545 \times 3.9}{100} \times 20 + 545 = 970$$

It is projected that because of high birth rate the population of Hussaini in 2010 will be 970.

Like other cities and villages of Pakistan, high growth rate in Hussaini is because of the following factors which are as under:

- Natural Increase
- Better Health Facilities
- Early Marriages
- High Fertility Rate

Table No. 6 MARRIAGE AGES

S. No.	Age Group	No. of Persons	% Age
1	16 - 20	29	35
2	21 - 25	32	39
3	26 - 30	10	12
4	31 - 35	5	6
5	36 - 40	6	7
	Total	82	99 %

Source: Field Survey

3.3 POPULATION DENSITY

Density is also called as man and land ratio. Density is the degree of compaction in a population. The degrees of proximity between people, the special balance of their social and economic assets.

According to 1981 census the density of population was 10 persons per acre, while in 2000 the population density has increased to 17 persons per acre.

Table No. 7 POPULATION DENSITY

Year	Population	Population
------	------------	------------

		Density/Acres
1981	310	10
2000	545	17

Source: Field Survey 1999 & C. Report 1981

3.4 POPULATION COMPOSITION

Population composition is primarily identified in the term of its age and sex composition. The total respondent of Hussaini is composed of 545 persons, consisting of 51 % male and 49 % female.

Table No. 8 POPULATION COMPOSITION

Age Group	Male	Female	Total	%Age
0 – 4	46	39	85	15
5 – 9	42	37	79	14
10 – 14	36	33	69	13
15 – 19	28	31	59	11
20 – 24	28	29	57	10
25 – 29	21	23	44	8
30 – 34	11	10	21	4
35 – 39	11	12	22	4
40 – 44	8	14	22	4
45 – 49	3	9	12	2
50 – 54	16	12	28	5
55 – 59	4	8	12	2
60 – 64	4	2	6	1
65 – 69	2	1	3	0.5
70 – 74	10	4	14	2.5
75 & Above	8	3	11	2
Total	278	267	545	98 %

Source: Field Survey: 1999

3.4.1 SEX RATIO

Sex ratio can be defined as number of males divided by No of females of population is:

$$\text{Sex Ratio} = \frac{\text{Number of Male} \times 100}{\text{Number of Female}}$$

Three factors influence the sex ratio viz preponderance of males births, migration and mortality of rates of sexes. In 1981 census the sex ratio was 96/100 and male female ratio was 49:51.

According to this field survey in 2000 the sex ratio is 104/100 and male female ratio is as the same 49:51.

3.4.2 AGE-WISE SEX RATIO

Age wise sex ratio can be defined as the ratio among persons at each age. This ratio is typically calculated for Hussaini Village.

Table No. 9: Population Composition of Hussaini

Age Group	Age Wise Sex Ratio
0 – 4	117/100
5 – 9	113/100
10 – 14	109/100
15 – 19	90/100
20 – 24	96/100
25 – 29	91/100
30 – 34	110/100
35 – 39	92/100
40 – 44	66/100
45 – 49	57/100
50 – 54	33/100
55 – 59	133/100
60 – 64	50/100
65 – 69	200/100
70 – 74	250/100
75 & Above	266/100

Source: - Field Survey

3.4.3 CHIL-WOMAN RATIO

The ratio between children under 5 years of age and the woman of child-bearing age is called a child woman ratio

Child women ratio can be calculated as:

$$\text{Child-women ratio} = \frac{\text{number of children 0-5} \times 1000}{\text{No. of women b/w 15-45}}$$

The child-women ratio of the study area is 345 children per 1000 women. It was found that 345 children were born to 1000 women or 1000 women can give birth to 345 children in a census year.

3.4.4 AGE STRUCTURE/POPULATION STRUCTURE

This is an expression of the number of people in a total population found in each age group. Population structure is the combination of children, adult and aged people. The children group is from 0-14 years, 15-64 years age group is called adults and 65 and above years age group are called aged.

Age structure reflects the demographic and socio-economic history of population. Age structure effects by the extent of mortality and fertility rates given in table no. 10.

Table No. 10 POPULATION STRUCTURE 1999

Total Population	Age Group						% Age Total Dependency Ratio/100
	0-5		20-65		65 % Above		
	No.	%Age	No.	%Age	No.	%Age	
545	292	54	225	41	28	5	100

Source: - Field Survey 1999

Table shows that 54 % of the total population is young. Adults are 41 %, the proportion of children is higher than adults and because adults proportion is important due to the fact that provides labor force and this is working age group and aged people are 5 % Of the total population.

3.4.5 DEPENDENCY RATIO

Dependency ratio is defined as the number of person in a population who are not economically active for every 100 economically active persons in that area. The dependency ratio is useful in economic studies. It has been calculated as following:

$$\text{Dependency Ratio} = \frac{\text{0 -19 age group} + \text{65 \& above}}{\text{20 - 65 age group}} \times 100$$

Table No. 11 DEPENDENCY RATIO

Age Group	Total Population	%Age	Dependency Ratio
0 - 19	292	54	-
20 - 65	225	41	142 %
65 & above	28	5	-
Total	545	100%	-

Source: - Field Survey 1999

According to this field survey the dependency ratio is 142 % in Hussaini. It shows that there are 142 dependents per 100 earning members. They are not active economically, so they depend upon other Persons.

3.5 MARITAL STATUS

Marital status of population refers to proportion of single, married and divorced persons.

Table No. 12 MARITAL STATUS

S. NO.	M. Status	No. of Persons	% Age
1	Married	198	75
2	Un-married (+20)	52	20
3	Widowed	13	5
	Total	263	100 %

Source: - Field Survey 1999

The data about the marital status in Hussaini, and it was found out that in 1999, both sexes 75% are married, while 20 % (above 20 years) are un-married and 5 % is belonging to widow group.

Table No. 13 MARRIAGES FROM 1950 - 2000

Years	No. of Persons	Avg./year
1951 – 1960	13	1.3
1661 – 1970	16	1.6
1971 – 1980	12	1.2
1981 – 1990	24	2.4
1991 – 2000	25	2.5

Source: - Field Survey 1999

3.6 **HOUSEHOLD SIZE**

A household can be defined as “A single person living and eating alone or a group of people living and eating together. In 1981 the total household were 47 and household size were 6.5.

In this field survey the total 75 households that have 545 populations, in which 278 male and 267 females and average size of persons per household is 7.26.

The largest household in the area has 14 members while smallest household has 3 members.

3.7 **TYPES OF FAMILY**

According to this field survey the average size of family is 7 persons per household.

While the density of room is 4 Per room.

There were two types of families living in study area.

Nucleated family and joint family.

3.7.a **NUCLEAR FAMILY**

Single family includes husband, wife and unmarried children. According to this field survey 73 % of the total family is of this type of family system.

3.7.b JOINT FAMILY

In this type husband, wife, and their married children are living together. The remaining 27 % of the total family lie in this category.

Table No. 14 TYPES OF FAMILY

Type of Family	No. of Houses	% Age
Nuclear	52	73
Joint	23	27
Total	75	100%

Source: - Field Survey 1999

3.8 CLANS OF HUSSAINI

Four clan settlers inhabited in Hussaini namely:

1. Shool Ktor
2. Murgh Ktor
3. Yughi Ktor
4. Fidu Ktor

As there is no written history of Hunza, Nager and Gilgit but the major source of information on the history of the area is the genealogical account of the ruling families of Hunza, Nager and Gilgit, compiled in 1930 by Sir Muhammad Nazim Khan, Mir of Hunza.

It is said that Musofir had come to Hussaini from Wakhan (Afghanistan) and settled here, so the first immigrant was Musofir, the epical ancestor. After Musofir, Ali Mohammad also came from Wakhan and settled here, Akhon Ktor, is called behind the name of their grandfather.

Fata Ali who has come from neighbouring village Passu, actually they are Quli (Sakhi) Ktor but in Hussaini they are called "Fido Ktor", behind the name of their grandfather. Yoghi Ktor, and Murgh Ktor are the sub-clans of Musofir.

Table No. 15 TOTAL POPULATION OF CLANS OF HUSSAINI

S. No.	Name of clans	Household	Population	% Age
1	Shool Ktor	55	411	75
2	Murgh Ktor	6	36	7
3	Yoghi Ktor	5	48	9
4	Akhon Ktor	5	23	4
5	Fido Ktor	4	27	5
	Total	75	545	100 %

Source: - Field Survey 1999

3.9 EDUCATION

Hussaini like other Ismaili towns and villages of Hunza enjoys a high literacy in the Gilgit District. The first school was established in Upper Hunza was in Gulmit in 1946, on the occasion of the Aga Khan III diamond jubilee ceremony. These schools are named as D. J. Schools. There are two primary schools in Hussaini village. For higher education students go to near by village Gulmit and down country.

Most of parents cannot afford to send their children to down country for higher education, but still a number of boys and girls are studying in Gilgit, Peshawar, Lahore, and Karachi.

SCHOOLS IN HUSSAINI

There are two primary schools working in Hussaini, one from Govt. and another from AKESP.

1. Government Primary school was established in Hussaini in 1971. Due to Urdu medium most of parents admitted their children in English medium schools, so now there are only 17 students in different classes.
2. The Aga Khan Diamond Jubilee School was first school established in Hussaini in 1962. It is an English medium school for boys and girls. There are 80 Students including 37 male, and 53 Female students.

Table No. 16 DIFFERENT LEVEL OF EDUCATION IN HUSSAINI

S No.	Classes	Male	Female	Total	% Age
1	Primary	43	30	73	39
2	Middle	22	24	46	24
3	Metric	20	13	33	18
4	Intermediate	16	4	20	11
5	Graduation	7	1	8	4
6	Post Graduate	8	-	8	4
	Total	116	72	188	100 %

Field Survey 1999

Table No. 17 NUMBER OF STUDENTS IN INSTITUTIONS

Sex	School	College	University
Male	109	15	3
Female	99	3	1
Total	208	18	4

Source: Field Survey 1999

Table No. 18 NUMBER OF STUDENTS IN DOWN COUNTRY

Sex	Gulmit	Gilgit	Peshawar	Lahore	Karachi	Total
Male	25	10	1	--	19	55
Female	23	8	--	1	3	35
Total	48	18	1	1	21	90

Source: Field Survey 1999

Table No. 19 LITERACY RATIO (+ 10YEARS)

Sex	Total (+10)	Literate	% Age	Illiterate	% Age
Male	190	149	78	41	22
Female	191	115	60	76	40
Total	381	264	69 %	117	31 %

Source: Field Survey 1999

Table No. 20 LITERACY RATIO EXCLUDING CHILDREN

S. No.	Descriptions	No. of Persons	% Age
1	Literate	264	48
2	Illiterate	117	22
3	Children (-10)	164	30
	Total	545	100 %

Source: Field Survey 1999

3.10 TRADITIONS AND COSTUMES

LANGUAGE

Wahki is the native language of Hussaini. It belongs to the Pamiri branch of eastern Iranian languages. They migrated to this part of Hunza from Wakhan, Pamir, and Badakhshan before the end of 18th century. Hunza wakhi does not differ widely from Tajikistan, Afghanistan and Chinese Wakhi. It is a bit more archaic, specially in vocabulary.

3.10.1 SOCIAL CEREMONIES

Social ceremonies are essential part of human societies. These ceremonies are related to human life cycle comprising of birth, Circumcision, Marriage and death. Other social event are also celebrated collectively, details of social ceremonies of Hussaini are given.

a) BIRTH

Being "patriarchal" and "matrilineal" society the birth of baby boy is marked with gun fire in the air which is actually a nosegay conveyed to all the neighbouring houses, friends and close relative who are looking forward to this occasion although the gun is fired by men, but the women of the neighboring houses, and close relatives pay a visit to the parent's house of the new born, presenting gifts in cash and in kind to the new baron. Sometimes services are also rendered for the new boron's parents help in conduction their agricultural works. Especially women coming from the neighborhood or close relatives of the new boron's parents extend their full cooperation to do the chores.

When the baby girl is born the event is taken up quietly as this is also an occasion of happiness but this happiness has to be concealed. Traditionally parents think no need to make announcement with gunfire, but are no restriction on the gift services.

The maternal grandparents of the newborn also visit then with expensive gifts. The hosts usually slaughter a goat or sheep to serve the visiting guests with food.

b) MARRIAGE

Marriage is another important event in the life cycle and also in the village social structure and activities. It is celebrated with great pomp and show. The parents in consent select the eligible boy or girl for the daughter or son with close relatives. At the time of engagement gifts are given to the bride. These gifts are in the form of cloths, pair of shoes, socks and a few woollies like sweater and shawl. These gifts are used at special occasions in the duration between engagement and marriage. Many of the gifts are left for the marriage. The Nikah ceremony takes place in the *Jamatkhana* where consent of both the parties is sought and paper sighed. For *Meheer* an average of Rs 10000 is decided with the consent of both the families also after the assessment of financial conditions of the bride groom, which is seldom payable at the time of Nikah and marriage.

Usually the people prepare their sons to get married in their early twenties; the girls get married in their teen age, maximum at 17-19.

c) **FUNERAL RITES**

When someone dies, the body is given the bath, and body is wrapped in white cloth (*kafan*). The near relatives, friends recite the Holy Quran for eternal peace of soul of the deceased. Before the burial the dead body is kept for all the mourners to look at face of the deceased. All attending the funeral say the Namaz-janaza and after the burial takes place. Usually no food is cooked in the deceased's house for some days. The relatives, friends and neighbors have the duty to provide cooked food to the bereaved family. On the third food is cooked in large quantity to be served to the villagers. There is a tradition called "*Chiragh Roshan*" where an oil lamp made of wool offered in to the oil (sesame or apricot oil) is placed in a Chiroughdon. The *khalifa* recites some verses of Quran and *Chiroughnoma* of Pir Nasir Khusrow and Ismaili Dayiee of 10th century. On the seventh day food (*Molida*) is cooked by the bereaved family in large quantity to be served to the villagers. On the fourth day again the villagers are served with food and the *Khalifa* recite Quran for the forgiveness of the soul of the deceased.

3.10.2 AGRICULTURAL CEREMONIES

a) ***KITZIT*: SPRING CELEBRATION FESTIVAL**

KITZIT is one of the Wakhi ceremony celebrated in the month of February to welcome the spring season. On the day of the celebration every household prepares variety of traditional food, gather at one place, where all the people pray for unity and blessings, betterment of all humans, pool all the prepared food and eat together.

KITZIT marks the end of wordlessness, lazy hibernating winter and gives new working life and regularize the people for new season to work with greater zeal in the field and outside homes. The farmers prepare their fields for the cultivation and also spread manure. There is an old custom of sprinkling flour over the wall and pillars of the houses. *Kitzit* was also a day for the youngsters to play *Toksuri* (a traditional base ball type game)

b) ***TAGUM*: SEED SOWING FESTIVAL**

Usually this ceremony takes place in the first week of March, which last for two days. On the first day the villagers gather at one place carrying the dish of *Khamali* or the bread of *Semn* (local dish made of wheat flour).

The next day again people gather at the same place with their own *Semns* (this day the *Semn* is cooked like pudding or like halva). Then a pair of oxen and the *Shahgunputhuk* (a person representative of a family, member of which are traditionally symbol of agriculture) is brought. The *Khalifa* prays for better crops, unity, and success. After prayer the *Shahgunputhuk* sows the seeds in the field, and then all the villagers start sowing the seeds (symbolically) in their own fields. *Taugm* marks the day of sowing after this rite , cultivation starts in the village followed by *Jugun* (a traditional polo played without horses), which is played by the villagers.

e) **CHINAR: HARVESTING FESTIVAL**

It is celebrated in the month of July, usually on 10th or 12th, when barley crops is ready to be harvested, the cutting of barley is a men's affair so they go out in the fields carrying *Khamali*, the bread, ghee, the migraine and *Spandur*, tiny herb grain the smoke of which is used as air freshener. They all gather by the field. A small rite takes place before the start of the crop cutting which is that the oldest man puts *Spander* on fire so smoke comes out and he cuts some barley and gives it to the men who bring them to their homes where the house wife cooks a delicious dish and put the barley grain in it. When the food is cooked then every man brings the food to a decided place of summoning, where they all take the food, and pray to God for good yield, after this the harvesting takes place.

3.10.3 RELIGIOUS INFRASTRUCTURE

People of Hussaini village belong to the Shia Imami Ismailia tradition of Islam. There is one *Jamatkhana* with one religious center. The *Jamatkhana* has a leader called "*Mukhi*" and "*Kamaria*" to assist him. Village has a *khalifa*, who is responsible to religious part of birth, death, and marriage ceremonies. Within the *Jamatkhana* there are different committees to manage the system. These committees comprise of volunteers from the village. There are Boys Scouts, Girls Guides, Shoes Company, Water Company, Light Company etc. All the committees are performing their duties under the supervision of *Mukhi*. *Mukhi* works under supervision of Local Council, Regional Council, national council and International Council. The office f the International Council is in Geneva and the National Council in Karachi.

RELIGIOUS CEREMONIES

a) EID-UL-FITER

On the day of Eid, all the villagers gather in *Jamatkhana's* ground and say their prayer. This is a very happy occasion for all of them. They show their happiness by embracing with and giving to congratulation to one another. Special foods and dishes are prepared. They visit one another's house. There are different recreational activities for children and they enjoy best of their time.

b. EID-UL-AZHA

There are also special preparations to celebrate this Eid. People are slaughtering animals. They wear new send meat/mutton to their neighbors and relatives. Sacrificing of animals is performed after saying prayer.

3.10.4 POLITICAL INFRASTRUCTURE

The *Lumbardar* is the head of the village in this area. He enjoys a great political power. There is a member of Union Council. A member of Community Arbitration Board in the village is responsible for conflict resolution. This Board is comprises of a president, secretary and members. Whenever a conflict arises, the sufferer tenders an application to the secretary/president of the board.

President and secretary issue a circular calling all members of the board in the office (Gulmit) on fixed date. This meeting in addition to Board members may have some elders of the village for conflict resolution. If any of the disputant ignores the decision of the board, he may tender he application in the Tehsil or Police Station. Normally Tehsil/Police Station first instructs both disputant parties to once again consult Arbitration Board. If the case is an outsider or with governmental organization, the Numberdar/Members Union Council/Member Arbitration Board are dealing with the case jointly.

CHAPTER - 4

SETTLEMENT PATTREN

4.1 SETTLEMENTS

“A dwelling unit is called settlement”. Hussaini developed about five hundred years ago. First of all Musofir immigrated to this area from Wakhan (Afghanistan) and settled here.

4.2 SETTLEMENT LOCATION AND DISTRIBUTION

People have been very particular about the location of their dwellings and giving importance to the sitting and situation of houses.

Old time settlements were located in the center of the village and agriculture area surrounded it, but in the past 30-50 years many new settlements have been constructed in different places of agricultural land.

The settlement is of dispersed type because the villagers site their houses on their individual fields. The area also remained safe and secure, and therefore the people did not find it necessary to cluster their houses together in selected sites. Thus the houses are scattered throughout the village from one end to the other end.

4.3 SETTLEMENT PATTERN

Settlement pattern concerns with the character of the settlement that is weather they are clustered or dispersed pattern.

In the study area there are three types of settlement patterns.

Clustered, linear settlement pattern, and dispersed settlement pattern

4.3.1 CLUSTERED PATTERN

In clustered pattern all the houses are grouped and attached to one another. In the study area, clustered pattern has developed at four different places.

4.3.2 LINEAR SETTLEMENT PATTERN

Settlement constructed in a line along the road, come in linear settlement pattern. In the study area, eight houses were constructed in linear type, along the un-metalled road.

4.3.3 DISPERSED SETTLEMENT PATTERN

These types of pattern are found to the north and south of the village.

4.4 GRAVEYARD

There is a particular place reserved for graveyard, located in the north of the village on a high land along the KKH.

4.5 DESIGN OF HOUSE

The important house type of the village is Wakhi house type. The Wakhi house is the combination of all human activities in one open connected space. The whole structure is erected on five central pillars to support the roof. The fireplace is in the middle of the floor. The different functions of houses are located around the central fireplace (*buxari*)(*gafe*). The house has a lantern ceiling type. The roofs have chimney holes (*ricen*) of about nine inches in diameter, which is the only way to let in light. During rain or snow a lid being placed over it, closes the ventilator. The roof is completely flat from end to end.

The inside of the house is divided into different sections to be used for different purpose e-g. sitting (*nikard*), sleeping (*razh*), store (*ganz*) etc. The villagers have also a separate portion for guests called “*Bangula*”. This mostly comprise two to three rooms for guests. Next to the entrance on the left side we find the room or storeroom. The entrance *Kunj* comprises the lowest level of the house as well as the place, which is called *Yorch*, where all footwear has to be left on the right and the left side two elevated platforms to be found called *Razh*, which are utilized for sitting during the day and for sleeping at night. When one enters the house the right platform is assigned to men and the left one to women. Behind central fireplace there is the cooking platforms called *Dildung*. This is the special sphere for the housewife for long houses. She is occupied with preparation of food for the whole family, the preparation and distribution of food is done here and she can survey the whole scene. Behind the cooking platform there is *Chikish* and store, which is reserved for housewife. There all utensils are displayed in a cupboard *Trak* and edible are stored in special containers of the store. Guests are asked to rest against the pillars supporting the flat roof and to sit in the corner of their respective platform (*Dildong Ben*), which is the place closet to fire in order to importance. The animal portion called *Ghel* is built at some

distance from the house. It consists of three to four rooms. There is also a room for storage of fodder called *wueshdoon*.

CHAPTER - 5 HOUSING CONDITION

5.1 HOUSES ACCORDING TO AGE

Age of the house reflects when was a settlement established. It was found out that the different houses were constructed because of various reasons. Although the old settlements of Hussaini village is eroded by Shimshal flood in early 1960s, but some houses are still there, an age of more than three hundred years old.

Table No. 21 AGE OF THE HOUSES

Years	No. of House	% Age
1 – 10	18	25
11 – 20	16	22
21 – 30	13	18
31 – 40	6	8
41 – 50	3	4
50 & Above	16	22
Total	72	99 %

Source: - Field Survey

The recent houses constructed in the past 10 years includes 25 % of the total houses, showing the trend of new buildings it means there is high trend of new buildings. The second important category are of those houses, whose ages are above 50 years and above, those constitute 22 % of the total houses, it means there are oldest buildings mostly people live here by birth.

There are 25 % of the total houses, these houses were built of following reasons due to:

1. One of the reason to be the family extension also because of the higher

families have broken into small units, who keeping in view their desire for separate living, have launched new houses.

2. The income of different families has augmented in the recent years. The flow of money has encouraged a desire in many of them to built houses with considerable modern amenities.

3. Many older houses were demolished and the present ones have been raised on Their foundation, this reflecting a trend to live in better houses.

5.2 STRUCTURE OF HOUSES/HOUSING PATTERN ACCORDING TO BUILDING MATERIAL

Houses are classified on the basis of their material. According to their structure, the houses of the study area can be classified into two types of houses, kacha, and pacca.

5.2.1 KATCHA HOUSES

Kacha houses are those, which are constructed from mud, stone and wooden beams. Mostly mud is used in construction of walls, wooden beams and pillars and hay is used for roofing. Materials used for construction of above-mentioned building are stones, mud, hay, and wood. Wood and hay is provided locally. Poplar trees are grown abundantly in the area, which are used for construction purposes.

In the study area mostly, roof of the katcha houses are constructed using wood, hay and mud. The percentage of katcha house in the study area is 48 %.

Table No. 22 HOUSE BY TYPE OF CONSTRUCTION MATERIAL

Type of Houses	Household	% Age
Kacha	48	67
Pacca	24	33
Total	73	100 %

Source; - Field Survey

5.2.2 PACCA HOUSES

Pacca houses are constructed using stones, bricks, and cement, and the roof is constructed using wood. In the study area 24 % are pacca. The percentage of pacca houses is less than katcha houses.

5.3 NEW TREND IN CONSTRUCTION OF HOUSES

In the past the houses were built in a manner that the houses and the animals rooms were attached together, but at present they are built separately.

The houses were kacha till some year's back, while Pacca houses are constructed at present materials like cement, tile etc. are abundantly used in construction of houses. The old trend seems to have finished and the people very keenly adopt modern ways.

In Hussaini 98% of the room walls are constructed of stones, while the bricks, is used only in 2% of the houses.

5.4 TYPE OF HOUSES

It is further divided into single and double storey.

5.4.1 SINGLE STORY HOUSES

In Hussaini 47% houses are single storey houses in the region while the new trend does not encourage the old design houses in the region.

Table No. 23 TYPE OF HOUSES

Type of houses	Household	% Age
Single Storey	34	47
Double Storey	38	53
Total	73	100 %

Source: Field Survey: 1999

5.4.2 DOUBLE STORY HOUSES (BILDI + MARA)

Although, there is no concept of double storey houses in the village, but in traditional houses, the upper portion store (*Mara*) is used for storage of dry fruits and other needs of life. While another portion (*Bildi*) is used for sleeping in

summer season, and also use for the prevention of dry fruits like dry apricot etc. in rainy days.

In the study area 53 % houses are double storey types (house including *Mara* and *Bildi*). These are mostly kacha houses.

5.5 LIVING ROOMS

The traditional living rooms (houses) are used for multi purposes i.e sleeping, dining, sitting, cooking food, and storage of foodstuffs.

Table No. 24 HOUSE HOLD ROOM/ RATIO

Rooms	No. of household	Room Available	% Age
1 Room	26	26	19
2 Rooms	41	81	61
3 Rooms	5	15	11
4 Rooms	3	12	9
Total	75	134	100 %

The field study show that 65 % houses have two or more living rooms per household, while 35 % houses having one living room or single traditional open house. Average number of living room is 2 while the density of living room is 4.06 per house.

5.6 BATHROOM AND TOILETS

According to this field survey 44 % houses have toilet system and 23 % have attached bathes, mostly in modern houses.

5.7 GUEST ROOMS

In the study area guestroom comprises 40 % of the total household. It also seems that some modern houses have an annexed guestroom with traditional house and attached bathroom for their personal guests.

5.8 ANIMAL SHED

Animal shed (*Ghel*) plays a vital role in their lives. Since keeping of cattle is common, therefore they need space for their sheds. They are found in different shapes. In most of the cases, a number of small rooms are found in the corner of the cultivable fields.

5.9 HOUSING FACILITIES / UTILITIES

Almost all the houses in Hussaini have the facilities of electricity and fuel.

Water Supply, Electricity, Fuel Consumption

5.9.1 WATER SUPPLY

Drinking water is obtained from glacier and piped water only in summer season, because the glacier water freezes in winter for three months. Therefore the villagers meet their need of water from the Hunza River. It is one of the main problems of the village.

5.9.2 FUEL CONSUMPTION

There are five categories of fuel used for cooking and heating purposes. The important source of fuel is as follows:

Fire wood, Electricity heater, Gas Cylinder, Coal

5.9.2.a FIRE WOOD

It is extensively used as a source of energy in Hussaini. Almost all the villagers have their own-planted forests called "*Zakh*" which is obtained from three different sources:

That which is brought from natural vegetation surrounding the village. It is still used by those, who are financially poor.

1. That which is obtained from the planted forests.
2. That which is purchased from outside, this trend is increasing day by day, with the improved transportation system. However only economically sound people can afford to purchase the wood from market.

5.9.2.b ELECTRIC HEATER

Electric heaters are used for heating and cooking purpose throughout the year. Economically sound people mostly use it, but it's also consumed by the low income people too.

5.9.2.c GAS CYLINDER

Gas cylinder is used as a source of energy. Gas cylinder is brought from Gilgit and China.

5.9.2.d COAL

In winter because of intense cold, coal is an important source of energy. It is used for heating purpose and it is also brought from China.

9.10 SOURCE OF LIGHT

Electricity is available in the village. Every house is facilitated with electricity in Hussaini, but in Zarabod there is no electricity available. Due to the lack of infrastructure like road, bridge water supply, and electricity, Zarabod is a seasonal settlement for the inhabitants of Hussaini.

The electricity is supplied by Khyber hydel Power station that is far away from Hussaini. This station has a capacity of 400-k.w. and for Hussaini it supplies 50 k.w. electricity.

5.11 DOMESTIC GADGETS

Different domestic gadgets reflect the economic situation of a study area. In the study area nine types of domestic gadgets are found in which radio, iron oven etc. are common.

In Hussaini 83 % household have radio, 71 % electric iron, while 96 % of the household have sewing machine. As most of ladies sew for themselves. T. V. and V.C.R. is watched in 5 % household, and Dish is found in 3 % of the total household.

Table No. 25 DOMESTIC GADGETS

S. No.	Types	No. of Household	% Age
1	Sewing Machine	69	96
2	Radio	62	83
3	Electric Oven	55	73
4	Iron	53	71
5	Gas Cylinder	8	11
6	Juicer	7	9
7	Charger	5	7
8	TV-VCR	4	5
9	Dish	2	3

Source: Field Survey 1999

CHAPTER - 6

AGRICULTURE

6.1 INTRODUCTION

Agriculture is one of the important means of livelihood and occupation of the people of the village. Which contributes the 70% of the village income employing more than 65% of laborforce.

The village has a plain area, while soil and temperature are suitable for agricultural practices with availability of water in the village.

6.2 SPECIAL ASPECT OF AGRICULTURE

a. OWNERSHIP

Hussaini like the rest of the Northern Areas is the home of small farmers distinguishing them from rural areas of Pakistan in peasantry. Almost all the farmers are owner cultivators. Overwhelming majority of households comprise small land possessing about two acres of land each.

b. SINGLE CROPPING

Mostly one cropping season is found in the region. Double crops do not mature due to low temperature. In some year ahead double cropping may be possible.

Table No. 26 GROWING PERIOD IN HUNZA VALLEY

S. No.	Altitude	No. of Growing Days
1.	5000	331
2.	5500	314
3.	6000	303

4.	6500	277
5.	7000	264
6.	7500	254
7.	8000	241
8.	8500	232
9.	9000	222
10.	9500	210

Source: AKRSP Gilgit

Nearly every household is engaged in agriculture while some being wholly dependent on supplement, their household income is other means mainly non-farming work.

c. MANURING

Organic manure and chemical fertilizer are used in general. The farmers keep a limited number of animals for organic manure. The organic manure is mixed with soil before cultivation of crops. This is not available to them in sufficient quantity. Urea is mostly used when crops have started to grow, but it is not available to them in sufficient quantity.

6.3 AGRICULTURAL METHOD

In agriculture ten years before old techniques of ploughing were practised with wooden plough and a pair of bullocks. But now tractors are used for this purpose. These are almost two tractors in Hussaini. The crude method of harvesting the crops is still in practice. The use of sickle is being practiced most commonly. In the past animals were used for thrashing, but now a days thrashers is used for thrashing of wheat and barley. There are two thrashers belonging to the villagers themselves, while the rest comes from out side of the village.

6.4 IRRIGATION SYSTEM

Nature has gifted Hussaini by two important glaciers namely Hussaini and Zarabod. In Hussaini for irrigation purposes, people have to work hard daily on glacier, otherwise they can't get water for irrigation and drinking too.

There are five channels, taken out from the glacier. These channels are repaired and cleaned once in a year in the spring season by the villagers. Following are the channels of irrigation in Hussaini.

Table No. 27 CHANNELS AND VOLUME OF WATER

S. No.	Name	Volume
1	Wouch Wudh	-
2	Molong Wodh	1 Yishoon
3	Tumoorben Wudh	2 Yishoon
4	Pusth Wudh	2 Yishoon
5	Gulmurod Resangige	3 Yishoon

Source: Field Survey

In local language "*Yishoon*" is the amount of water sufficient to irrigate a certain piece of land. The volume of water in Hussaini depends on the duty of people. The farmers also have to face the shortage of water when the temperature is low and glaciers have not melted.

On the other side Zarabod has a unique irrigation system, four or five farmers (*Diquinishth*) are responsible to irrigate the all sort of crops, such as wheat, potato and fodder crops. During their tenure, nobody has allowed to irrigate their own lands. Every householder has to perform his duty there every ten to fifteen years later. They perform their duty for four months tenure (May - September). The water originated by Zarabod glacier is shared by two villages Zarabod and Khuramabad (Passu). The stream irrigates the lands on alternate days. The stream water is not sufficient for the irrigation of these two villages. An area larger than the irrigated land of Zarabod is barren due to shortage of water.

6.5 CROPS

6.5.a WHEAT

Wheat has remained the staple crop in Hussaini for long time, but now-a-days potato has taken its position. In Zarabod it is also the main crop. It accounts only 10% of the total cropped area in Hussaini. When potato was introduced in the area, the cultivation of wheat is decreasing gradually. Wheat prefers mild temperature and 2" of rainfall. At the time of ripening and harvesting the temperature should be above 57⁰ F. Such type of condition prevails in the area. In Hussaini it is sown in April and is harvested in August.

6.5.b BARLEY

Barley is also cultivated in this area. Its yield is low as compared to wheat. It accounts 35 maund per acre. Now a day it is used as a fodder crop.

6.5.c MAIZE

It is kharif crop in this area. It is sown in May and harvested in October. Maize is primarily a fodder crop.

6.6 FRUITS

Most important fruits grown in this area are apple, apricot, pear, grapes etc. but the production is consumed locally due to inaccessibility to the large market area.

Table No. 28 NUMBER OF FRUIT TREES IN HUSSAINI

S. No.	Types	No. of Trees	%age
11.	Apricot	696	42
12.	Apples	735	45
13.	Peaches	99	6
14.	Mulberry	73	4
15.	Pears	15	1
16.	Walnut	8	0.5
17.	Plums	5	0.3
18.	Almond	5	0.3

19.	Grapes	4	0.2
20.	Total	1550	99.2%

Source: Field Survey 1999

6.7 VEGETABLES

Different varieties of vegetable are grown in this village. They are mostly grown in kitchen gardens and consumed locally due to inaccessibility to large market areas of down country. Some vegetables are dried for winter season. Important vegetables are tomato, potato, turnip, peas, cabbage, carrot, radish, onion, and chili.

6.7.a POTATO

Potato is the most important and single cash crop of Hussaini and the entire Hunza Valley. The Aga Khan Rural Support Program (AKRSP) encourages the cultivation of potato in Hunza. Due to this encouragement normally each household has devoted most of their land for potato cultivation. Because of its continuous cultivation for many years, its production is decreasing annually. In potato production and quality Hussaini is one of the important village in Hunza Valley.

**Table No. 31 POTATO PRODUCTION AND EXPORT OF
HUSSAINI VILLAGE (1998 - 2000)**

Years	No. of Bages/80 kg	%age	Trucks (80-Bages)	Production (Maunds)	Values in millions
1998	4125	36	52	8254	2.4
1999	2746	24	34	5492	3.8

2000	4622	40	58	9244	3.2
Total	11493	100%	144	22890	9.4

Source: - Field Survey 1998, 1999, 2000

6.8 HORTICULTURE

This is also an important source of income and includes fruit growing and vegetable production. The environmental factors like soil, climate and water all have contributed their best for making the area suitable for horticulture. Several kinds of fruit trees are planted here. Most important fruit trees grown in the area are apples, apricot, pears, mulberry, etc. their acreage is increasing every year.

In Hussaini every household has his own small or large orchard, previously the farmers did not give much attention to scientific aspects of planting trees. But now a days these orchards are being developed under the guidance of agricultural experts and more than hundreds have been developed on scientific basis. Moreover considerable new area is brought under orchards every year. In view of its grains, obtained from horticulture, the farmers are now giving preference to horticulture as compared to food crops. It is hoped that in future forty to forty five percent of cultivable land will under the fruit trees. In short it has a bright future.

It is worth mentioning that AKRSP has played an important role to promote interest among the farmers for development of horticulture in the region.

6.8.1 PROBLEMS OF HORTICULTURE

Lack of marketing facilities is adversely effecting the tempo of the development.

It is essential that the proper step for marketing facilities should be taken so that the farmers can get real benefit of their labour.

6.9 AGRICULTURE EXTENSION PROGRAM

Agriculture extension program is started on the basis of following points:

- To prevent the crops from damages.
- To increase the production of crops.
- To develop horticulture.
- To develop the cultivation of vegetables.

The following steps were taken to improve the above mentioned points.

6.9.1 PROVISION OF SPRAYS

The crops and orchards are sprayed with insecticides to prevent them from all kinds of insects and diseases. Some are sprayed free of cost to make the people aware of its significance.

6.9.2 SPRAY PUMP AT CONCESSION RATE

In the village spray pump full of drugs have been given to them at concession rate they could themselves prevent their crops from damages.

6.9.3 PROVISION OF DIFFERENT KINDS OF WHEAT

Different kinds of wheat were sown on experimental basis for the improvement of per acre yields. The farmers liked the idea and they started growing these new kinds of wheat.

6.9.4 TWO CROPS

Two crops in a year can be grown in half the area of Hussaini, while in other half one crop is grown. After the harvesting of wheat maize and millet can be cultivated. Through this method production has doubled since 1982.

6.9.5 TRAINING

Since AKRSP has become functional in the area, it has trained the people in this field. These experts teach the members of their respective societies that how to graft, trim and spray the plants. The villagers pay their fees per hour for spray and grafting. So that in this way the farmers could become independent of government or some body else's help.

Moreover in the meeting of AKRSP the farmers are interested how to improve the production. AKRSP calls the President and General Manager from each society in three months to the conference to know their problems and then helping them in solving their problems.

6.9.6 PROVISION OF VEGETABLE SEEDS

Similarly vegetable seeds were also distributed among the farmers, so they could grow them and observed the differences between the production of old and the new varieties. Turnip and pears are particularly cultivated for commercial scale. Other vegetables, like bean, radish, and cabbage, also been planted to grow them on a large scale. New kinds of seeds were also introduced.

6.9.7 PROVISION OF NEW KINDS OF APPLES

For improving the quantity of apples new kinds of apples have been imported from France by AKRSP's Agricultural Department. This department provides loans to member of the society for a joint nursery. The department also provides plants for individual gardens.

The engrafted trees of farmers are grafted by new in the supervision of the departments. For grafting good pieces are given by the department.

6.9.8 PROVISION OF OTHER PLANTS

The department (AKRSP) buys plants from government nursery and provides these plants to the societies on the same price. These plants include cherry, almond, walnut etc.

The department has established a nursery on one-acre land for women society in Hussaini named "Hussaini Women Tanzeem". Annually thousands of plants are distributed from these nurseries.

6.9.9 PREVENTION OF CROPS FROM DISEASES AND INSECTS

For the prevention of crops from the disease and insects AKRSP have make arrangements for spray on experimental basis. Beside it also tries to control plant disease by other measures. Now a day fruits like apples, pears and dried fruit are exported in cities down country. This department is also working for improvement of fodder crops. The department also distributing magazines and booklets, so those farmers could know how to look after their crops. They are introduced how to produce more crops with the use of fertilizers, prevention of disease etc.

6.10 LIVESTOCK

Livestock are very important in an agricultural community and considered as backbone of economy. In Hussaini beside sheep and goats, cows and poultry are also reached for dairy products and supply of meat.

Different animals are kept for different purposes. Mechanization is still not being common. Cattle provide drought power to the farmers. The bulk of domestic needs of meat are met by local supply. Sheep and goats provide milk and meat; their skin is also used for different purposes. The carpet that is made from hairs of

goats is called "*Plos*" from the wool is called "*Yijin*". These are used for only domestic purposes.

In Hussaini goats and sheep are taken to the summer pastures from May to September. Women do not hesitate to go to summer pastures probably because the workload up in the pastures is less than their normal workload and there is also a feeling in the Fairy Mountains. Women's work is limited to look after the cattle and cooking.

On high pastures butter is produced from milk and preserved for their marriage ceremony and other uses. *Qurut* (cheese) is produced by boiling milk and dried in the open air out of the access of animals. The milk has to boil for several hours to produced *Qurut* and firewood has to collect from distant places, which are felled down by sliding or damaged, by snow avalanches. Bu now a day deforestation is also started in these areas.

As compared to the past the number of cattle is decreasing with the passage of time. This is because the inhabitants how send their children to school. Thus there is no one to look after the cattle. In average a villager keep five to eight cows and bullocks and ten to twenty sheep, and goats. There is no program for breeding of animals. All the animals are local breeds they are less profitable.

Although a majority of farmers still view with the tending of livestock as a way of life and a pattern of subsistence several families seem to be on their way out of herding. This decline of livestock tending has already has some negative consequences on the diet and health of families. Moreover unlike the past practice of making a healthy diet milk obtained from the cattle is now merely consumed for tea which is easy to make as compare to soup which takes quite a few hours to prepare. The availability of made of woolen cloths has reduced the importance of local wool and in turn of goats and sheep.

Table No. 33 NUMBER OF LIVESTOCK IN HUSSAINI

S. No.	Name	No. of livestock	%age
1	Goats	916	52
2	Sheep	413	23

3	Cows	194	12
4	Bullocks	134	8
5	Poultry	110	6
	Total	1767	100%

Source: - Field Survey 1999

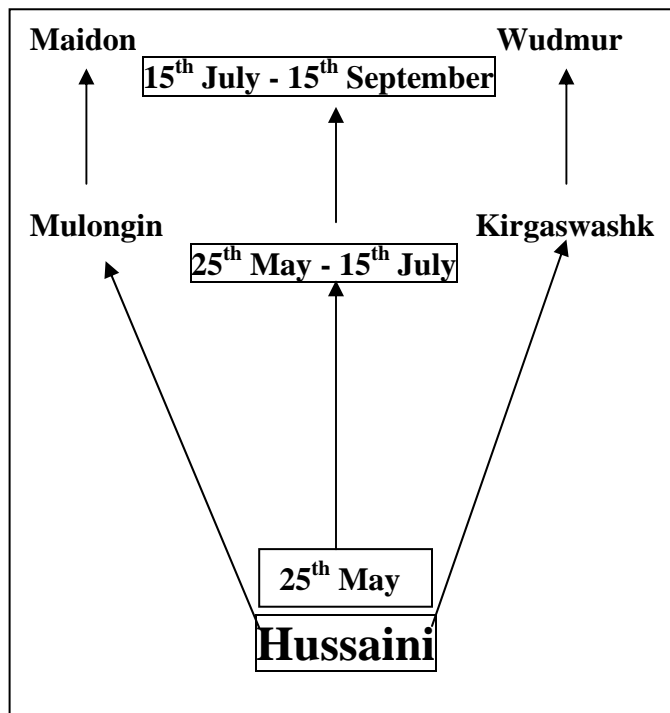
6.11 PASTURES IN HUSSAINI

In Hussaini good grazing grounds on high pastures are available to the people. These pastures are not restricted for any tribes. All the *Sesonik* have the right to use all kind of resources available on the pastures. They can build houses on the pastures. They can use these pastures according to their access. These pastures are utilized from May to September. In winter these are not habitable due to heavy snowfall. In winter grazing is only possible in the near to settlements.

A number of pastures of Hussaini are given below are used by the villagers.

Mulungin, Pasth Garben, Wuch Garben, Kirgaswashk, Wudmur, Maidun.

PASTURE MANAGEMENT IN BATURA



There are many grazing places around the village. These grazing grounds are utilized in autumn, winter and spring season from 15th September to 25th May.

The list of grazing areas around the village are given below:

Table No. 34 **PASTURE MANAGEMENT IN HUSSAINI**

S. No.	Grazing Grounds	Grazing Duration
1	Borith Roy	15 th Sep. – 15 th Oct.
2	Ishkor Sar	
3	Shalmol	15 th April – 25 th May
4	Ghay Par	
5	Borith Bala	15 th Oct. - December
6	Ghulingal	
7	zarabod	December – 15 th April

Source: - Field Survey

6.11.1 BATURA PASTURES

It is a U shape valley. Its alignment is from northwest to southeast, situated on the northwest of the KKH and Passu village. Batura pastures are located on the both sides of Batura Glacier, in the south lies the area of Hussaini and in the north is Passu. The people of Hussaini have the right to graze forty oxen in the pastures of Passu. These are seasonal settlements for four months from May to September.

6.11.i BATURA GLACIER

Batura Glacier, which is 57 km long, and a number of peaks more than 7,000 meters high flanking the glacier, e.g. Batura I (7785 m), Passu peak (7678 m) are the highest peaks of the Batura Range.

The Batura glacier terminus in both well known and of considerable local significance because it descends so close to the Hunza River. Historically it is known to have occupied a position either close to, or across, the Hunza River and may even have created a temporary dam in the past, with resultant flood damage to the villages of Passu and Hussaini. Since the 1940's, however, the glacier has retreated quite rapidly until 1966. Since that time it has again tended to advance steadily and is at present 700 m from the Hunza River⁶. This later advance caused a considerable damage to the Karakoram Highway and led to the intensive study carried out by the Chinese investigation group. They concluded from ice flux, ablation and velocity studies, that the glacier should stop advancing during the period 1997 - 1997, with a predicted further advance of 180 m - 240 m before that time, taking to within 300 m of the Highway. Starting from the 1990's they predict that the glacier will once again decline and this will last for at least 20 to 30 years.

It is notable that the Batura, which is a longitudinal valley glacier of great size and complexity, does not having a similar temporal fashion to the much smaller and relatively simple transverse glaciers hitherto described. The phase of rapid advance in the early part of this century displayed by those glaciers did not occur on the Batura, which remained virtually stationary from 1885 to the 1940's. However, the retreat which occurred in the 1950's and 1960's and the subsequent advance (both real and predicted) perhaps shows a pattern which is related to advanced to larger scale changes in the regional environment.

6.11.ii MASS WASTING IN BATURA (SOUTH)

Mass wasting is the common geomorphic phenomena in the Batura southern pastures. The following mass wasting types are common in the area.

a. ROCK SLIDING

Rock sliding is one of the common geomorphic process in these pastures. It is very difficult to travel particularly in the rainy days. Some places are very famous for rock sliding which are locally called "*Khumreg*". It damages the natural

⁶ Meller, K. J. The International Karakoram Project, (volume-2),1984, p. 4449.

forests and also some time kills the wild life. In summer season, when cattle are grazing there, it kills a number of goats and sheep.

According to this field survey rockslide has killed 26 cattle in three years, 1998 to 2000.

b. DEBRIS FLOW

When torrential rain falls in these pastures, debris started flow in different gullies. It also damages the natural forests of these areas. A debris flow was occurred in 1994 at *Baj Yaz* and damaged forest over a considerable area.

c. SNOW AVALANCHES

Snow avalanche is also common in Batura pastures. In winter heavy snow falls on the top of the mountains, and wind accumulate them in the depressions and it comes down in the form of avalanches. In some places it remains throughout the year, i.e., *Chiwto kh Shhot* and *Nowgarch Yaz*. Snow avalanche damages a lot of natural forests every year. The inhabitants of the seasonal settlements use them as firewood. Sometime it also kills the wild life, when they are graze in the areas, where snow avalanches are common. Sometimes it damages the houses and animal shades.

6.11.iii BATURA AS A TOURIST SPOT

Batura provides beautiful scenery to foreign tourists. It attracts people from all over the world to Hunza valley. Thousands of tourists travel Batura every year, because it is one of the famous and 8th longest glaciers of the world. Although the easy way to Batura is from the south of Batura glacier but the northern side is advertised in most of guide books and maps. All the scenery and peaks are situated in the south of Batura glacier. The middle of this glacier is white and the both sides are black with material load. At some places small glaciers have merged with each other and formed medial moraines.

6.12 PROBLEMS OF LIVESTOCK

The most important problem is of fodder. In summer season there is no problem but in winter when the area is covered by snow, intensive cold always prevails there. Various diseases of the animals are as follow in the area.

- a. Food and mouth disease
- b. Black quarter disease
- c. Sheep and goats pox
- d. Parasitic diseases

There is also a problem in Batura pastures, in rainy days when goats eat a poisonous wild-fruit "*Chibjew*" it kills them. In heavy rainfall there is no proper shedding for cattle in Batura pastures and it is also impossible to provide covered sheds to all the villagers cattle, and therefore a lot of cattle die because of this.

6.12.1 ANNUAL LOSS OF LIVESTOCK

According to my field survey, there are many causes of livestock loss. These include diseases, disappear, and natural hazards. Natural hazard includes wild life sliding, heavy rainfall, and poison wild fruit.

Table No. 35 ANNUAL LOSS OF GOATS/SHEEP

Causes	1998	1999	2000
Disease	198	25	37
Natural Hazard	70	18	34
Disappear	62	115	48
Total	330	158	119

Source: - Field Survey

Table No. 36 ANNUAL LOSS OF GOATS/SHEEP BY VARIOUS CAUSES

Years	Disease	Wildlife	Sliding	Rainfall	Chibjew*	Disappear	Total
1998	198	42	11	9	8	62	330
1999	16	3	15	7	15	114	169
2000	37	11	10	4	10	48	120
Total	251	56	26	20	23	224	619

Source: Field Survey 1998, 1999, 2000

*Wild poisonous fruit

Table No. 37 GENERAL SURVEY OF GOATS/SHEEP

S. No.	Description	1998	2000	Avg/year
1	Birth	321	270	295
2	Self-ate	64	78	71
3	Gifted	73	36	54
4	Sacrificed	24	31	28
5	Sold	27	7	17
6	Lost	330	120	225
7	Total (G & S)	1329	819	690

8	Avg/household	18	11	13
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Source: - Field Survey 1998, 2000

CHAPTER - 7

ECONOMY

7.1 SOCIO-ECONOMIC CONDITION

Socio-economic conditions are very important for the development of an area and are important indicator of living standard of an area.

7.1.1 STANDARD OF LIVING

In general the living standard of people is not so high because mostly people are engaged in agriculture with low income live here. Only few persons are there with high standard of living, those who are abroad for a long time.

7.2 EMPLOYMENT

In Hussaini most of the population is engaged in agriculture, some are working in construction sector as a carpenter, masons, labour etc. The job in agriculture is not so much paying and jobs in other fields are limited, therefore many people are working in the other parts of the country and many are employed abroad. They come to the village once in four to five years. They gradually send remittance to their families and relatives.

The total employed in government and non-government organizations within the village are 14. The people working outside the village and in Pakistani cities are 15 and 10 are working abroad. The following table shows the number of employed in different sectors.

Table No. 38

EMPLOYEES

Sector	No. of persons	%age
Govt. Service	12	36
Non-Govt. Service	11	33
Overseas	10	30
Total	33	100%

Source: Field Survey

Table No. 39 OCCUPATIONS

S. No.	Occupations	No. of persons
1	Soldiers	10
2	Teachers	7
3	Carpenters	3
4	Health workers	3
5	Tailor	8
6	Weaver	3
7	Driver	4
8	Wahizeen	2
9	Religious guide	3
10	Shopkeeper	7
11	Tourist Guide	1

Source; - Field Survey

According to this field survey the people of Hussaini are engaged in four types of occupations. They are farmers, businessmen, government and non-government servants and some overseas employed.

7.2.1 GOVERNMENT AND NON-GOVERNMENT DEPARTMENT

According to the field survey 31 % of the total household is engaged in such departments. It includes education, health department's etc. Teachers, armed forces and health workers and other employes are working in government and non-government departments.

7.2.2 FARMERS

Almost all the villagers are engaged in agriculture, but 49% household has no any source of income from other means. From these households nobody is employed in government or non-government departments. They totally depend on agriculture.

ANNUAL DIET CONSUMPTION

Diet	Used in 1999	Avg/household	Avg/day
Tea (kg)	1689	23 kg	0.3 kg
Flour (bages/80 kg)	1394	19 bags	21 kg
Meat (kg)	2475	34 kg	0.5 kg

Source Field Survey 1999

7.2.3 BUSINESSMEN

About 9 % of the total population are engaged in business activities, which include some large and small shops etc.

7.2.4 OVERSEAS EMPLOYED

11 % of the total household are employed abroad and mostly in middle east countries.

7.3 INCOME GROUP

During the field survey it is observed that the people hesitate to tell me their income. Still some information is collected and according to that the people of study area can be divided into three groups.

7.3.a High Group

7.3.b Middle Group

7.3.c Low Group

7.3.A HIGH INCOME GROUP

High group consists of 8 % of the total household. The monthly income of this group is Rs. 25,000 and above. Businessmen and overseas employed are included in this group.

7.3.b MIDDLE INCOME GROUP

The monthly income of this group is Rs. 5,000 to 15,000. They comprise 29 % of the total household. Some government and non-government employs and small shopkeepers are also included in this group.

7.3.c LOW INCOME GROUP

The income of this group is Rs.1000 to 5000 per month. They comprise 51 % of the total household. Farmers are included in this group, those who have no other source of income except agriculture.

Table No. 41 INCOME GROUP

Classes	No. of Persons	Income Group
1000 – 5000	38	Low Group
5000 – 10000	21	Middle group
10000 – 15000	8	
15001 – 20000	4	High Group
20001 - 30000	4	

Table No. 42 INCOME GROUP

Income Group	No. of Persons	%age
High	8	10
Middle	29	39
Low	38	51
Total	75	100%

Source Field Survey 1999

7.4 GENERAL LIVING CONDITION

The facilities provided for public in an area determine the economic conditions of that area. These facilities include health, education and transportation etc.

7.4.1 HEALTH FACILITIES

This village has been backward in health facilities for a long time, but the ministry of health provided first aid for this village last year, but it's not sufficient for their requirements. Aga Khan Health Service (AKHS) and Government health workers are also serving the people. There are two health workers from AKHSP

and two are from the Government. They provide first aid facilities and also give family planning guidance to the people.

7.4.2 TRANSPORTATION FACILITIES

Transportation facilities are important for the development of an area. Karakoram Highway (KKH) played an important role in the development of Hunza Valley. Buses and vans are used for traveling from Hussaini to Gilgit. Public transport is provided by both Private vans and Government buses (NATCO).

Hussaini Village is linked with the KKH by two un-metalled roads. There are five intra-roads, which leads to every houses and agricultural lands. Tractor is the major domestic transport for agricultural activities, i.e. for ploughing, threshing, and carrying of potato production to the KKH.

Table No. 43 MEANS OF TRANSPORTATION IN HUSSAINI

S. No.	Name of vehicles	No. of vehicles
1	Tractor	2
2	Suzuki	3
3	Van	2
4	Motorbike	2
	Total	9

Source: Field Survey

Table No. 45 CONSTRUCTION OF UN-METALLED ROADS

Constructed	Length (meters)	%age
Government	1731	55
Self-help	1396	45
Total	3127	100%

Source: Field Survey 2000

CHAPTER - 8

GULMIT AS A CENTRAL PLACE

8.1 CENTRAL PLACE THEORY

According to Christaller (1933), " A central place is an area which provides goods and services to surrounding area or complementary area. Central place is a settlement, which performs central function and serves to the surrounding hinterland.

The basic element of central place according to Christaller was that such a place should be a source of goods and services to an area larger than itself.

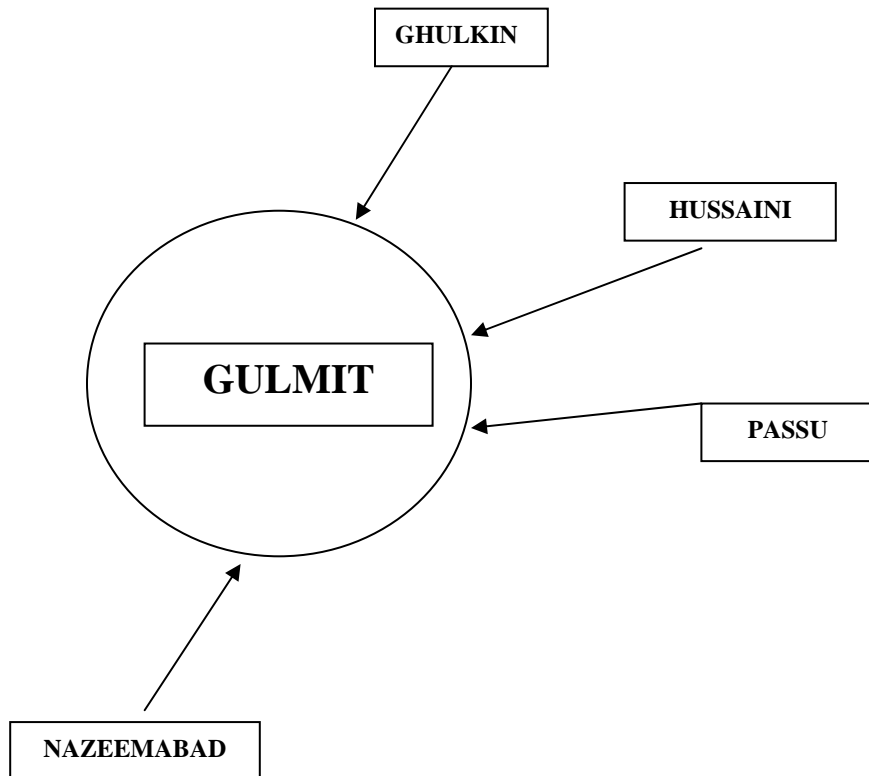
In the theory threshold population, which is a minimum requirement to support an economic activity running successfully. Below certain threshold population that activity will be not profitable and will run in loss.

According to this theory, Girls College in Murkhoon is not remunerative there, because the required minimum population needed to run that college is not sufficient. Because Moorhoon's village population is not supporting the minimum requirement of that college.

According to this field survey Gulmit is the largest village in Gojal (Upper Hunza) by size and population. Its population is more than two thousand. Gulmit plays a central role in provision of goods and services to neighboring villages and also provides some specialized services to entire Gojal, which consists of about 25 villages. The second higher center is Aliabad Hunza, and the next largest center is Gilgit, which provide large market and various specialized services to different valleys, Hunza, Nager, and Ghizer.

There are four nearest villages located in its complementary area are:
Ghulkin, Nazeemabad, Hussaini, and Passu.

Gulmit as a Central Place



8.2 GOODS AND SERVICES TO THE COMPLEMENTARY AREA

Gulmit as a central place, providing different goods and services to the surrounding villages, with the details given below:

1. SHOPS

There is a small market area in Gulmit where different commodities for daily uses are available in almost thirty-seven shops. Most of the shops sell miscellaneous items and there are some shops dealing specialized services and specialized commodities as follows:

Table No. 46 SHOPS IN GULMIT

S. No.	Shops	No. of shops
1	General Store	15
2	Garments Store	2
3	Stationary	2
4	Photo Studio	1
5	Photo State	1
6	Music Center	2
7	Bakery	3
8	Tailors Shop	1
9	Barber Shop	1
10	Furniture	3
11	Handicraft	3
12	Canteen	3

13	Electric	2
14	Medical Store	1
	Total	40

Source: Field Survey

2. HOSPITAL

In Gulmit Government hospital was established in 1980. There are eight persons employed including one male doctor.

3. POST OFFICE

There is one post office at Gulmit established in 1962. Gulmit post office serves the surrounding villages.

4. TELEPHONE EXCHANGE

In Gulmit telephone exchange was established in 1978, which have a capacity of 20 lines.

5. AGRICULTURE OFFICE

Agriculture office is also functioning at Gulmit since 1985. It provides new varieties of seeds specially potato seed to the villagers. The exchange of potato seed increases the production of potato.

6. BANK

A bank is working in Gulmit, The National Bank of Pakistan. It provides services to lower Gojal.

7. POLICE STATION

There is one police station for entire Gojal.

8. TEHSIL

Gulmit is the headquarter of the Gojal tehsil, and its based here in Gulmit. The Tehsil comprises of more than twenty-five villages in Gojal, Upper Hunza.

9. GODOWN

There is a big Godown where wheat is stored. This Godown supplies wheat to the people from Nazeemabad to Passu. Annually 20,000 bags of wheat are stored for the villagers in this Godown.

10. SCHOOLS

There was not a single school before 1946 in the other villages of Gojal. In 1946 a Diamond Jubilee School for Boys was established in the Gulmit on the occasion of the Diamond Jubilee Ceremony of Sir Sultan Mohammad Shah, Aga Khan III under the instruction of Aga Khan. At present there is one Government High School for Boys and one D. J. High School for Girls. One public high school, working there is named as Al-Amin Model School for boys and girls. This school has been established self-help basis.

Forty-eight from Hussaini students, including 25 male and 23 female are admitted at Gulmit schools. The boys school is at the distance of 7 km, while the girls is at 5 km distance from Hussaini.

Table No. 47 STUDENTS FROM HUSSAINI IN GULMIT SCHOOLS

Sex	G. Boys H/S	D. J. Girls H/S	Ali-Amin	Total
Male	22	-	3	25
Female	-	22	1	23
Total	22	22	4	48

Source: Field Survey 2000

11. AGA KHAN HEALTH CENTER

Aga Khan Health Center is on function at Gulmit since 1973, particularly serving the infants, children, the pregnant mothers and deals with their delivery.

12. ISMAILI STUDY CENTER

Ismaili Study center was established in 1977 by the villagers on self-help basis. There are 3,500 books in this study center.

13. JAMATI INSTITUTIONS

There are a number of Jamati institutions serving for the community welfare and betterment. The main objectives of the institutions are the voluntary work for the community welfare and development. The following institutions are working at Gulmit.

1. Ismaili Local Council
2. Councilaition and Arbitration Board

3. Aga Khan Youth & Sport Board
4. Economic Planning Board
5. Social Welfare Committee
6. Women Activity Committee
7. Town Planning & Environmental Protection Committee

Gulmit provides other amenities including veterinary, family planning, museum, polo ground, and hotel etc.

CHAPTER - 9

SOCIO-ECONOMIC DEVELOPMENT

Different socio-economic development projects have been introduced in the village by Government and non-Government organizations.

9.1 GOVERNMENT ORGANIZATION

The various projects by the government in Hussaini are listed below:

1. Karakoram Highway (KKH)
2. Primary School
3. Unmetalled Roads
4. First Aid
5. Embankment for the Protection of Suspension Bridge

9.2 MPACT OF KARAKORAM HIGHWAY

The impact of the Karakoram Highway is very conspicuous on the socio-economic life of the village people. Therefore is worth while to discuss the different aspects of KKH as follows.

- i. KKH, which is commonly known as Silk Route or Pak China Friendship Highway, is the eighth wonder of the world. Its construction was started in 1965 and took 20 years to complete. The real KKH starts from Thakot and continues up to Khunzhav Pass and has one hundred or more bridges. The length of KKH is 1300 km and width is two lanes. It was completed in 1986. Karakoram Highway provides an important link between Pakistan and China.

- ii. This road serves the tourist traffic and acts as supply route for the mountaineers to the down country and other neighbouring countries. This road is playing an important role to change mountain society and to break the isolation of the people in the area.
- iii. Hunza Valley is much more influenced by KKH in every aspect, but I will elaborate the changes, which have taken in Hussaini Village.

Due to the construction of this road:

- Potato turned into a cash crop because of easy accessibility of the market area and can easily be transport to down country; this is providing an important source of income.
- Agricultural extension programs by different government and non-government organizations have become easier, helping development of agriculture.
- The highway has made it easier for the people to export their local products of cottage industry to down country.
- Much attention to the growing of fruit trees is another trend now-a-days thus helping the export of different types of fruit to the down country, and is a good source of income. Before KKH the fruit products were wholly to be consumed within the village.
- The highway has made it possible for the people to get all necessary items available in heir own local market. Thus not only make them self-sufficient but also helping in the development of their own market which also serve the surrounding areas.
- The highway has also effected the dressing and dietary habits of the people. For example people generally now use cloths manufactured in the down country instead of the woolen cloths produced in the village itself. The use of basmati ghee has replaced the desi ghee.

- Energy used in houses for lighting, heating and cooking the people now mostly have turned room kerosene oil and wood to electricity, gas, coal etc. Before KKH the people used wood and cowdung for fuel purpose.
- Tourism is also growing in the area day by day, which in future can become an important source of income.
- Impact on literacy rate is also becoming obvious with the fact that on the one hand more educational institutions are being opened, and on the other, students from Hussaini are able to go to Gilgit and the down country for higher education. About 80 % students are studying in Karachi, and it has partly become easier and possible by the KKH.

9.2 NON-GOVERNMENT ORGANIZATION

The Aga Khan Rural Support Program (AKRSP) and UNICEF are two important NGOs, working in Hussaini to carry out different socio-economic projects.

9.2.1 AGA KHAN RURAL SUPPORT PROGRAM (AKRSP)

After the annexation of Hunza and the abolition of the principal state a gap concerning rule, law, administration and organization sprang up. It took a long time until government institutions could partially fill this gap. The AKRSP supported institutional development on the local level by establishing community-based organizations (CBOs) like Village Organizations (VO) and Women Organizations (WO). These associations popped up all over Hunza within a few years.

AKRSP has been playing an important role not only in Hussaini but also in the whole Northern Areas and Chitral District. The organization has been a sign of progress and prosperity in this area. It has started its developmental projects in this area in 1982. It deals with the improvement of the condition of the rural population and provides basic humanistic facilities to the masses. Special concentration is given to the infrastructure masses.

AGA KHAN DEVELOPMENT NETWORK (AKDN)

The AKDN is an international network dealing with issues such as education, rural development, culture, health services, housing programs and various others. The AKDN itself is apart of the overall Aga Khan Foundation (AKF). The AKF-headquarters are in Geneva / Switzerland and were founded in 1967. The AKF, as one of the major international agencies for development co-operation, gets funding from a variety of donors such as the European community, various western countries, well situated members of the Ismaili community and from the Government of Pakistan. Within the sub-branches of the AKDN, the Aga Khan Rural Support Program (AKRSP) is the most important one for rural development. The AKRSP was established in Gilgit and covers 84% of the household in the Northern Areas (only few of these households belong to Ismailia, the AKRSP tries to make no differences between religions). The AKRSP and like other institutions related to the AKDN (like the AKCSP that focuses on the maintenance of historic buildings, handicrafts and festivals) are well accepted by the villagers and therefore quite successful. However the activities of the AKDN have shaped the development of the valley extraordinary. In addition to this the various offices provide job for higher qualified Hunzakuts when they return from their studies in down country. Besides, only employment in the public

sector represents alternative job opportunities in this rural area. The AKDN is still extending its activities by establishing health facilities and addition schools.

9.2.1.a AIMS AND OBJECTIVES OF AKRSP

The aims and objectives of this organization are as bellow:

- It is a rural development project. So the aim of this project is to increase the per capita income of the rural people, because the inhabitants of this region have only half of the average per capita income from the rest of the country.
- To provide the civic facilities such as clean drinking water, roads, water channels, provision of agricultural inputs like seeds, pesticides etc, improvement of livestock, micro credit facilities etc.
- To empower the whole community rather than individuals.
- To educate the community to bring balance between their needs and available resources.
- To create a sense of development among the people to improve there life conditions by themselves rather than to wait for the aid of outer agencies.

9.2.1.b ORGANIZATIONAL MODEL

The work of AKRSP focuses to evolve a village organizational model. Because in this way it only becomes possible to identify infrastructure projects like roads, irrigation channels etc. thus during its stages AKRSP forms village organizations (VOs). These VOs identify the problems and needs of the number of village community. AKRSP launched development programs according to the needs of village organization. When VOs evolve an organization model, AKRSP enter into partnership with the VOs under which each side has reciprocal obligation .By obligation it is meant that at the time of organization formation, the member contribute and deposit equitable savings. If the deposit savings are too small than the estimate of the development program, the AKRSP does not enter into partnership. One essential and significance element of the strategy is the provision of one time grant for a productive physical infrastructure (PPI) project per village organization.

9.2.1.c WORKING PROCEDURE

To carry out a productive infrastructure program, a three stages dialogue takes place between the staff member of VOs.

a. FIRST STAGE

During the first dialogue the district program officer (DPO) explain the objectives and method of AKRSP for villagers are then asked to identify the scheme that would be undertaken by them for their own benefits.

b. SECOND STAGE

In second dialogue, the proposed scheme under the supervision of the program concerned specialists are examined. The social organizer (SO) is responsible for the management and other operation of the scheme. During this stage the cost estimated is also worked out.

c. THIRD STAGE

Finally during the third stage assignment of the responsibility between the AKRSP and the contribution of the villagers, is work out.

9.2.1.d RULES OF VOS MEMBER

Every VOs or WOs members should strictly follow the following rules.

1. The organization should arrange its weekly meeting regularly and maximum attendance of the member is necessary.
2. During the construction of project every member should deposit 1/4 of his or her wages in the weekly saving.
3. The organization should nominate their members for technical training.
4. It will be the responsibility of all the members of the organization to co-operate with their trained person.
5. Ten person of newly irrigated land should be specified for forest.
6. An organization should co-operate with other development agencies.
7. An organization should assure that there is no dispute between members of the organization with other organization.
8. It should be responsibility of the organization to arrange market for their surplus products.
9. All the regarding fertilizers, seeds etc. should be returned in time.
10. It is the responsibilities of AKRSP to check the reports of VOs monthly.

9.2.1.e PROJECTS OF AKRSP

AKRSP has launched two projects for Hussaini, Bridge for animals, and nurseries.

9.2.1.a BRIDGE

AKRSP constructed a bridge in 1986 over Hunza river to get easy access for animals to Zarabod village. AKRSP had provided fund (Rs. 300,000) to Hussaini VO for the essential of this bridge, but unfortunately this bridge was broken by winter's wind within one year. Community reconstructed the bridge two times on self-help basis, but the wind broke it in every winter. Now the bridge is hanging there. This project was failed due to:

1. Lack of planning
2. Insufficiency of fund
3. Lack of technical skills
4. Climatic hazard, wind

9.2.2.b NURSERIES

A large area for plantation was elected at the "*Zavor*" of Zarabod. AKRSP provided thousands of poplar trees to the members of VOs for plantation every year. But this project was also failed due to the following causes:

1. Proper protection was not given to these newly planted trees
2. Some trees were provided to the members by AKRSP were damaged before plantation.
3. Khushali Committee in the village was not effective.
4. Villagers didn't control their cattle.
5. Neighbor village cattle (yaks) also let loose on the plants.

There is also a nursery of women organization. AKRSP provided fruit trees for the nursery. Potato is also grown there. Potato is exported to the down country and the money is divided over all members of WO. They also grow vegetables and consumed by locals. Every member has to work in that nursery. The saving of Hussaini women organization is more than one million. They are very active and work hard to increase their savings as compared to male (VO).

AKRSP has trained the people in different fields. The trained persons are as follows:

1. Animal Husbandry	1
2. Forestry	1
3. Poultry	1
4. Vegetables	1
5. Accountant	8
6. Processing of Jam & Pickle	6
7. Scientific Apricot-drying Process	3

9.2.2.c SUPPLY OF DIFFERENT MACHINES

AKRSP provided different machine for the villagers:

1. Machine for drying apricot
2. Machine of butter Decatur
3. Machine of kernel breaker

9.3 LOCAL NON-GOVERNMENT ORGANIZATIONS

Various local NGOs operate in Hunza. Some of them work as an integral part of the programs implemented by the AKDN, others co-operate with international NGOs Such as the World Wildlife Fund (WWF) and the World Conservation Union (IUCN). Local NGOs work in different fields, most of them deal with environmental, social and educational matters.

9.3.1 HUSSAINI SOCIAL WELFARE ORGANIZATION (HSWO)

Hussaini Social Welfare Organization (HSWO) was formed by the students in 1992. The major objectives of the NGO are following:

1. To create the sprit of patriotism and develop unity and co-operation among the people of Hussaini.
2. To import education on the on the most modern time up-to date method of education to the people.
3. To provide facilities of education to deserving persons of Hussaini.
4. To give facilities and help the ill, jobless and helpless persons of the village.
5. To communicate the problems of the people of Hussaini to the Government of Pakistan, NGOs and Jamati Institutions, and try to solve them.

9.3.2 COMMUNITY BASED ORGANIZATIONS

There are a number of community-based organizations (CBOs) in the village. The main objectives of the mentioned organizations are to work for the welfare and betterment of the community.

- i. Hussaini Khushali Committee/Women Committee
- ii. Hussaini Gents & Ladies Volunteer Corps
- iii. Hussaini Boy Scouts & Girls Guide

CHAPTER - 10

PROBLEMS, SUUGESTIONS, AND CONCLUSION

11.1 PROBLEMS

The socio-economic and geographical study shows that Hussaini village faces a number of problems; some of the problems are from natural process while others are man-made.

10.1.a NATURAL PROBLEMS

10.1.a.i GLACIER

The village is on the lateral moraine of Hussaini glacier and the glacier is advancing for the last many years. It has cut and destroyed three channels, taken out from the snout of the glacier, and it is moving towards KKH and Hunza River. It is one of the great hazard or menace for the village. People are working hard on glacier daily to get water for drinking and irrigation purpose in summer while in winter, water has to be brought from Hunza-river.

10.1.a.ii EROSION

Area of Hussaini village is decreasing annually due to erosion of the Hunza river. The flow of the river is highly and sharply towards the village and hits the cliff, where there is cultivable land of the village. The soil flows away with the water the agricultural land of the village is badly suffering. There is no support or help on behalf of the government or any other NGOs to protect the land and property of Hussaini village. It is needed to divert the direction of water, which is not a difficult task.

10.1.a.iii CLIMATE

Blowing of cold winds in winters is a natural hazard for our area. It uproots the trees and it is a great loss of the locals. Besides this, it is also a factor in soil erosion in this area. The heavy snowfall confines the human activities for a couple of months. It also creates many problems for the animal folk. Food shortage for animals is the result of this snow falling season, which also leads to the dying of many animals.

10.1.b. MEN- MADE PROBLEMS

- Agriculture land (cultivated) is annually decreasing due to construction of houses. Due to the lack of change of variety of crops and continuous cultivation of the same crop, potato, the production is decreasing annually. Besides this there is no agency to provide the improved seeds, pesticides and insecticides to the local farmer.
- There is the lack of basic facilities of water supply, education, health, recreations etc.
- Low ratio of girls' education and lack of educational facilities for both girls and boys for higher education. There is no bridge and road for Zarabod village; situated across the Hunza river and it is a hurdle to the easy access of human, agricultural machinery, and animal to that agricultural land.
- The unplanned modern cemented houses are not habitable due to sever cold in winter season.
- High birth rate is increasing the density of the population of the land.
- There is no legal protection for natural forests and wild life and the forest are cut and wild life is hunting ruthlessly.

10.2 SUGGESTIONS

- Following steps are recommending for the improvement of socio-economic condition to overcome these problems.
- Fund and proper supervision of experts should be provided for the supply of water by government and non- government organizations.
- There is a need of middle school for boys as well as for the girls because the students walk for about 6 to 7 kilometers Gulmit for study.
- There should be programmes for enhancement of the awareness about the control of population growth. Otherwise there will be no availability of land in future for proper cultivation and house construction.
- Better and modern guidance should be provided to the villagers regarding scientific methods of agriculture to increase the production of crops, i. g. exchange of crops annually and the use of the healthy seeds, and chemical fertilizer in proper ratio etc. Besides, there should be agriculture center to ensure the proper supply of healthy seed, up-to-date fertilizers and other important ingredients of agriculture.
- There should be a proper planning for the allotment of area to the construction of houses to protect the cultivated land. There is need of town planning to construct the houses according to climate of the area. The inner side of houses should be made of mud, otherwise different diseases effect their health.
- Government and Non-Government organizations should take necessary steps to change the direction of river to save the village from erosion, which is diminishing the land to larger extent.
- The feasibility of Zarabod for permanent settlement is studied and of possible, the basic infrastructure, such as bridge, road, water supply, electricity etc. should be provided through NGOs or by the government.
- As there is shortage of drinking and irrigation water. There should be an alternative system to compensate it. NGOs or government should take interest to solve the main problem of water shortage. There are two alternatives, either water provided from the Hunza river or from the neighboring village of Gulmit through pipeline.

- There should be legislation to protect the natural forests and to preserve the wild life of surrounding areas.

10.3 CONCLUSION

The socio-economic survey was carried out from August 1999 to August 2000. During the field survey, I was able to collect information about the history of the people, their living conditions, their economy, needs, requirements, and amenities. Problems of the people were traced out and some suggestions for the future were made for the solution.

From the geographical study of Hussaini village the following conclusion may be drawn:

1. The area has undergone considerable development programs, and it has tremendous potentialities of land, and pastures resources which need development in the coming years.
2. Due to unemployment many people left the village in search of jobs. It needs cottage industries and other facilities for the provision of job opportunities.
3. Hussaini is important for potato and fruit production such as apple, apricot etc. it is an important potato supplier of Gojal, to the lowland of Pakistan.
4. Other development programs like AKRSP can contribute a great deal in the area for its progress through the participation of local people who heartily welcome such initiatives.
5. In spite of the absence of educational facilities in the village, literacy ratio is higher than other villages in valley of Hunza.

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CURRICULUM VITAE

ALI

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Education

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200 **Master (M. Sc. Geography):**
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Research Work (Report) :

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Trainings in Geographic Information System (GIS):

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Workshops:

- “*Environmental Conservation*” in Skardu by IUCN, MACP, Hunza Northern Areas.
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Computer Knowledge: Windows-Applications (MS Word, Excel, PowerPoint 2000), Inpage, Photoshop, MapInfo, Internet (www, html, e-mail and chat).

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