

## **RURAL TO URBAN TRANSFORMATION – KARIMABAD, HUNZA**

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### **ABSTRACT**

Developments of the modern age have resulted in deterioration and destruction of traditional values. This is evident from the rapidly disappearing traditional environments.

The Northern Areas of Pakistan comprise of a region dominated by rugged mountainous terrain. Due to the geographical and physical constraints, the settlements here have developed mostly as isolated units. But in the recent past, development of a road network opened up these areas to the rest of the world, making them vulnerable to foreign influences that are rapidly penetrating into the life and norms of the people.

Change is inevitable in any growing community and it reflects on development of the physical form of built environment. This study aims at understanding the character of existing traditional built-environment, of the historic settlements in the Northern Areas of Pakistan, evaluate and analyze their evolution, identify the forces of change and finally reach to conclusions and propose determinants necessary for the survival of the traditional fabric. Karimabad, the most important and largest town of Hunza valley, is taken here as a case study.

### **1. INTRODUCTION**

The Northern Areas of Pakistan, lying among world's highest mountain peaks, form a geographically rugged region. Due to their remoteness and limited accessibility, these regions have developed mostly as isolated units, having very little interaction with the outside world. These independent mountain kingdoms had developed as isolated units, thus the community evolved as an introvert society, cut off from foreign influences due to physical and geographical barriers. The traditional built form of settlements in the region has been molded in accordance with the climatic and geo-physical needs of the area. In the past, this region maintained socio-cultural interrelation with other adjoining mountainous regions that now belong within other political boundaries, forming a larger zone of independent mountain settlements/kingdoms. The evidence of this overlapping of cultures is today reflected by similar architectural forms, lifestyles and other cultural norms observed in settlements of neighboring areas. The mountainous areas that now come within the borders of Pakistan started an intercourse with regions of this country only a few decades ago.

The regions including Hunza, Gilgit, Chitral, Skardu., etc. forming the 'Northern Areas of Pakistan', do not hold the status of a province but remain as Agencies. With recent developments in communication systems, primarily that of road network, this centuries of isolation came to an end and the area opened up to foreign influences. Tourism also played an important role in this regard. The changes have been accepted by the people willingly and openly - as a result of which they have become vulnerable to a rapid influx of influences that are foreign to them, and they are tempted to unquestioningly adopt them just to become 'modernized'.

The opening up of this area to uncontrolled foreign influences has started to show its impact on the built environment, as well as the social norms of the people. A general awareness, among the people, about modern lifestyle and living standards has led to efforts for improving their living conditions. Some of these are, no doubt necessary and essential for elevating living standards in the region. But in this process of 'change' several things are being adopted, which would bring adverse effects to the existing built environment and may result in an irreversible damage to the fragile ecosystem of the area.

## 2. KARIMABAD:HUNZA'S LARGEST SETTLEMENT

The settlement of Karimabad is the largest town in Hunza valley, and thus the most developed amongst others. The present town of Karimabad is an accumulation of fourteen clusters of settlements, incorporating the old settlement of Baltit within itself. Karimabad's altitude above sea-level lies between 7,500 ft. and 8,500 ft., covering an area of about 1.5 sq. miles. According to 1990 census its population was 4,600 people living in

616 households (M. Khan, 1996). (According to a report published by AKTC in 1997, the population of Karimabad is 5000 people).

The old settlement of Baltit, in Karimabad, lies on the mouth of Ultar glacier, perched on top of a hill. It was established as a defensive fortification by the rulers of Hunza Kingdom, and gradually expanded into a residential settlement. The hierarchy of houses in the settlement follow the social hierarchical pattern; with the king and nobility at the top and houses of populace concentrating around the forts base.

The fort, being residence of the ruling 'Mir', acted as the center of all activities. The houses of the old settlements of Baltit form three main clusters (**khuns**), each of which belong to a different clan. The oldest of these clusters are 'Khurukshal Khun' and 'Diramishal Khun', located immediately below the base of Baltit Fort (Figure #1). The new developments and extensions have radiated from these old parts.

### 2.1 The Settlement Pattern

The traditional settlement pattern, as physically evident from the clusters around Baltit Fort, was extremely compact, with narrow streets and pathways, meant only for pedestrian or animal traffic. The edges of the settlement were clearly demarcated by walls, cultivated fields, orchards and/ or water channels lined with trees.

Entries to the cluster were guarded by watch towers, called 'Shikar' in local language (Gibbs, 1994). The primary determinants of this built form were climate and terrain. On the higher steeper slopes, houses and fort were built, whereas on the lower and gentler slopes and terraces were cut for agriculture and cultivation.





**Figure #1:** Compact and contained form of the old settlement

The clusters were oriented towards southwest, aligned in rows along the natural contours of the terrain. The longer axis of the settlement ran parallel to the natural contours. The houses were also planned in such a way that their longer axis remained parallel to the contour. The rear or northeast sides of the houses were cut into the hill thus protecting it from cold down slope winds. The whole settlement had a visually unified and repetitive pattern, in terms of color, form, texture and scale, except for the mosques and the fort; the fort being larger in size and scale, whereas the mosques having extensive wood ornamentation.

### **2.1.1 Streets**

The traditional circulation system followed a hierarchical pattern, with major pathways running along the contours at the same level, whereas the

secondary minor pathways, lanes and steps going up or down the slopes connecting the major paths at right angles. Special care was taken to have these secondary lanes protected from winds.

All the pathways within the old settlement were meant only for pedestrian and animal circulation, thus not having the capacity for accommodating any type of vehicular movement. The streets were left un-paved and dusty. The stepped lanes had uneven and irregular stone boulders or blocks as steps.

### **2.1.2 Community Spaces And Public Facilities**

The community spaces and public facilities served as the main focal points of the settlement. These include the fort, polo-ground and caravansera

below the cluster of houses and the graveyard further below and away from the settlement (Figure #2). These were easily identifiable because of their larger scale and proportion as compared to the rest of the fabric of settlement.

### 2.1.3 Open Spaces

The community areas often had open spaces near or surrounding them. Often the streets/ pathways at their junctions had spaces for sitting and gathering in small groups. Such spaces are an important feature of the settlement as the elders of the community sit here and share their thoughts and experiences with the younger people as well as the touring visitors.

The most important open space for the community, has always been the polo-ground, strategically located near the entrance of the settlement, but

outside its boundaries. In present days, although these grounds have lost their original function but they still serve as a major focus for the community as all the public gatherings and meetings take place in this space.

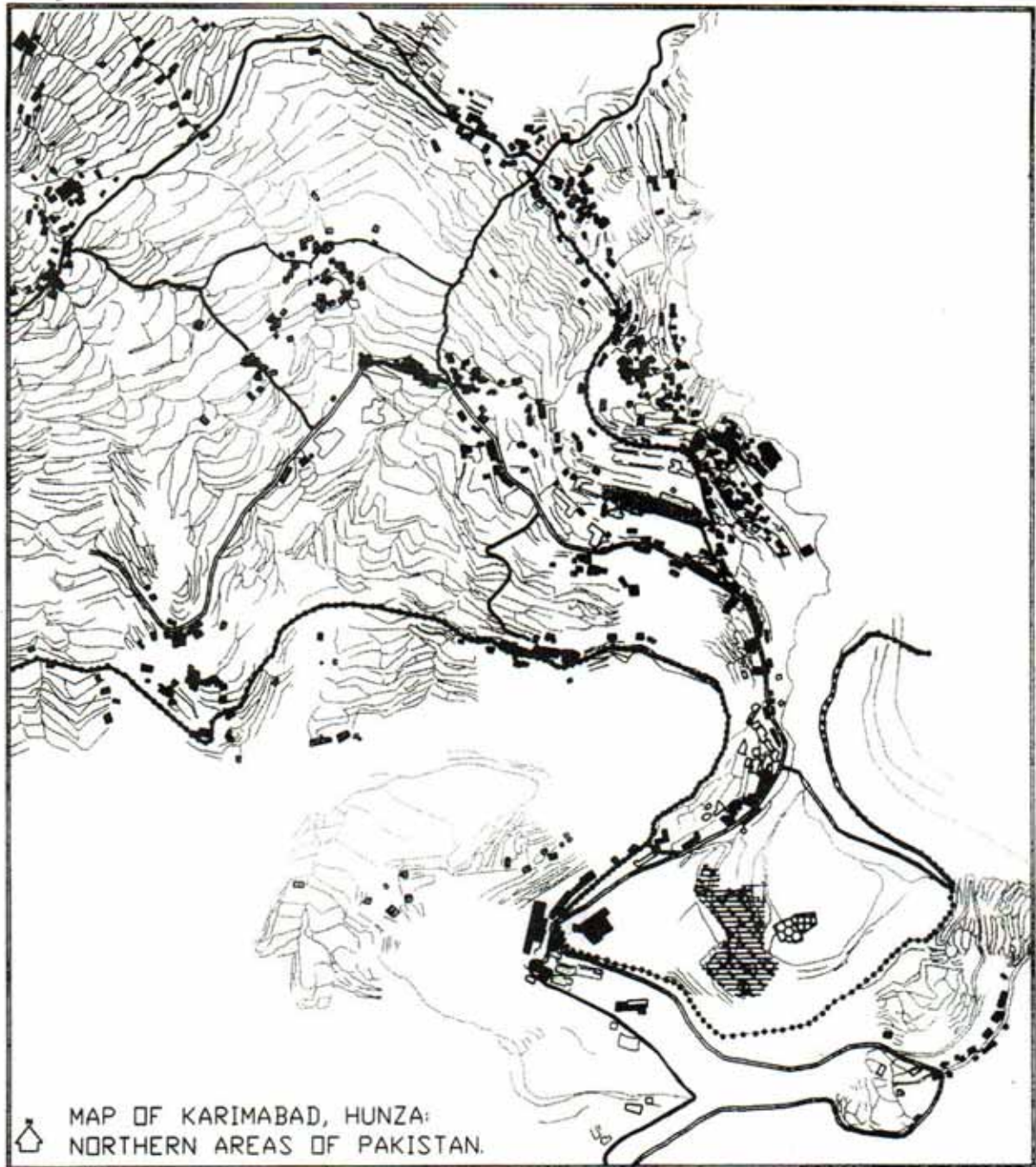
### 2.1.4 Agricultural Land And Orchards

In the harsh mountain terrain it was necessary for the people to develop a system of agriculture and farming, for survival. The sloping terrain did not allow for large flat spans of agricultural fields, thus small terraces were cut into the slopes for this purpose (Figure #5). These lands started from the outer periphery of the settlement demarcating its boundaries. Through the highly developed system of channeling glacial watershed into the terraced fields, agriculture developed and a self sustained community was founded. The agricultural produce was only sufficient enough to last the community



**Figure # 2:** Small gathering space for the community at street junction

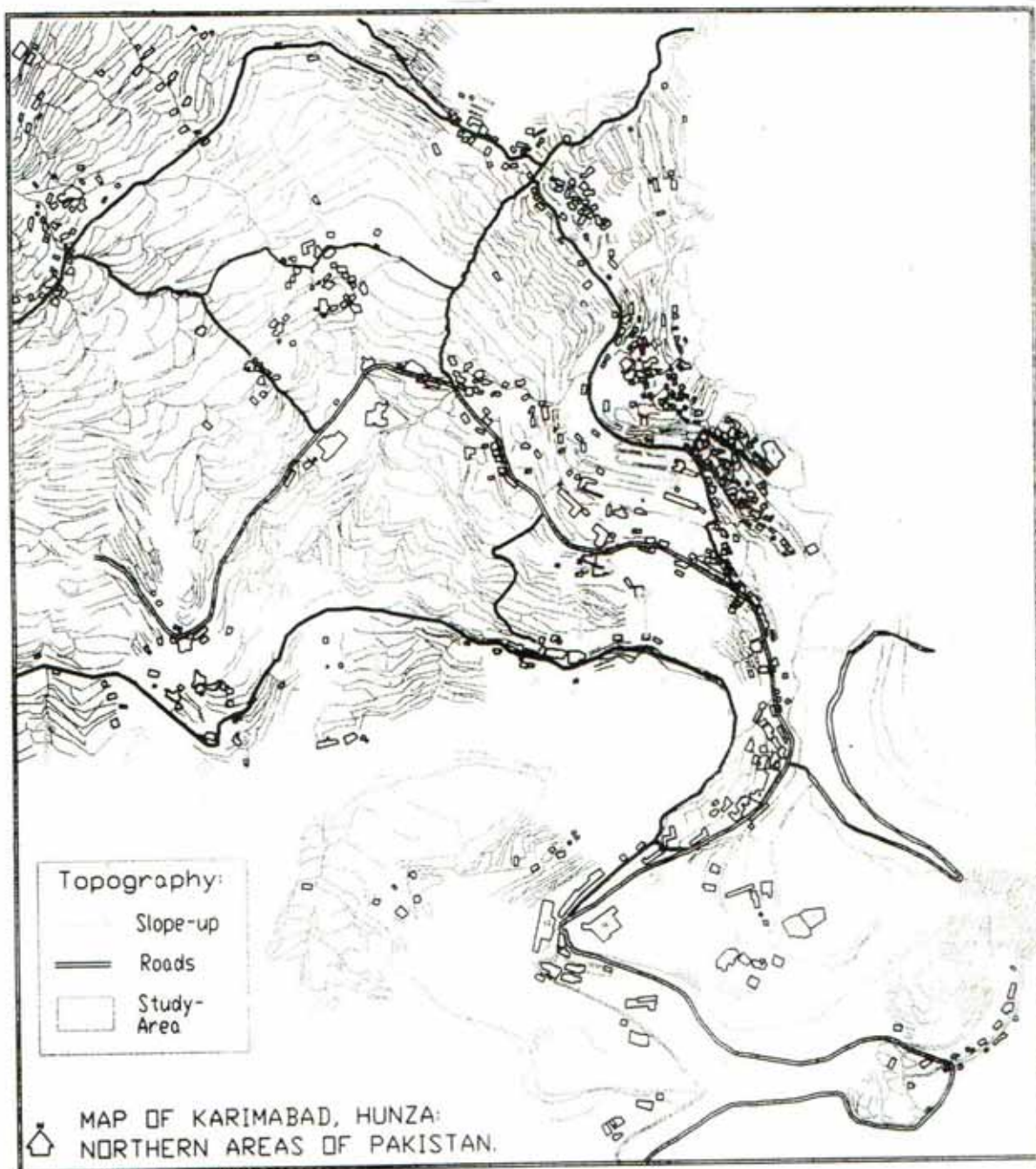




**Land-use in Karimabad:**

Residential	Graveyard	Water Channel
Commercial	Mir's Palace	Underground Water Channel
Public/ Administrative Facilities	Baltit Fort	Vehicular Roads
Study Area	Pologround	Helipad

**Figure #3:** Map of Karimabad, showing general Landuse



LOCATION	ALTITUDE	LOCATION	ALTITUDE
1 Baltit Fort	2615 m	7 Graveyard	2538 m
2 Wazir's House	2595 m	8 Mir's Palace	2510 m
3 Dirimshal Khun	2590 m	9 Hilltop Hotel	2500 m
4 Berber Dala	2580 m	10 Rakaposhi View Hotel	2490 m
5 Khurukshal Khun	2570 m	11 Samarkand Dala	2485 m
6 Pologround	2550 m	12 Serena Lodge	2475 m

**Figure #4:** Topographical map of Karimabad



for one season, till the next harvest. No surplus was produced which could be exported out.

The fruit orchards contain apricot, apple, grape, mulberry and walnut trees in abundance. The large quantity fruits produced is dried and stored for use in winter. However, due to lack of facilities for processing and drying a substantial quantity of fruit gets wasted. In addition to this the surplus fruit can also not be exported to down country due to difficulty of transportation.

## 2.2 Characteristic Physical Features

A feature of the landscape is the terraced slopes where agricultural fields are marked by low rubble stone retaining walls. These walls are constructed by placing rounded field stones meticulously graded for size, with large boulders at the bottom and cobbles at the top. As agricultural land was

precious, settlements tended to be very compact, tightly built and concise. Due to this fact the distinction between settled area and open farmlands was quite clear.

This environmental quality of Karimabad, is governed by vast green expanses, with small pockets of compact settlements in between. This dominant feature of terraced landscape gives the town its aesthetic appeal, which is a pleasure for the visitor.

## 3. DEVELOPMENT AND CHANGES

Being the major town of Hunza, development pressures in Karimabad are quite high and changes are rapidly taking place, specially along the KKH and areas which have metalled roads, linking with the main Highway. As a response to



**Figure #5:** Open ended and sprawling agricultural lands

these developments several changes occurred, resulting in a decline and degradation of the natural environment as well as the traditional built form. Today the town is no longer compact and confined within the boundaries of the old fortification but stretches in a suburban pattern from Momenabad to Hyderabad (the two nearby small towns), along three main routes; Berber Channel, Samarkand Channel and the Main Road. Today there is an ever increasing disregard for traditional principles, as a result of which the years old, balanced ecosystem is being badly damaged.

In order to understand the causes of the changes that today mar the traditional pattern of this historic town it is important to evaluate the developments in their historic continuum (Figure #6). These developments have been summarized step-wise as follows (Gibbs, 1994);

- **Cutting down of watch towers** guarding village entry gates on Berber Channel in 1891.
- **Construction of new palace** by the Mir in 1923 at a location 130m. lower in altitude than the historic village with materials and a style, leading the village away from tradition also had a change in the traditional physical form of social hierarchy, in which the Mir lived at the top above the nobility, who in turn lived above the serfs. This act also represented the expression of Mir's ownership of his own private property.
- In 1940's the concept of '**wage labor**' was introduced in Karimabad, which was the second step towards capitalism, after private property. This was further popularized in 1960, when the Aga Khan on his visit to Hunza encouraged the men to join the Pakistan Army. Thus they became more acquainted with the ideas of wage labor,

private property, technology, communications and institutions. These soldiers when they returned with military pensions, in the 1980's, introduced these new ideas in the region.

- **Abandonment of fort completely** in 1945, and with it the compact village form and building tradition.
- **Arrival of roads and private automobiles** in Karimabad in 1960, ending centuries of pedestrian environment, scarring the hillside, trucking in tons of products with waste packaging, and leading to strip development as well as a colossal increase in the land area covered by the village.
- **Installation of first flush toilets** in 1970's, thereby polluting and wasting water resources, contaminating the soil, and spreading disease from the overflowing soak pits and septic tanks.
- **Completion of Karakorum Highway**, in stages from 1972 - 1979, leading to the economic penetration of Karimabad followed by a wholesale weakening of local culture, including the loss of traditional ideas of building and urban form. Hunza was now openly vulnerable to complete economic, military and cultural absorption into Pakistan, thus losing its independent status which it had maintained for thousands of years amidst powerful neighbors, both North and South.
- Proliferation of shoddy hotels, stores and shops in **strip development along the new roads** beginning in 1960 and increasing in pace after 1974. In 1960 President of Pakistan, General Ayub Khan visited Hunza and a jeep road was extended to Hyderabad. This was later extended by the Mir towards Karimabad, right upto his new palace. Thus the arrival point



changed and got shifted to this area.

- In 1974, Government of Pakistan abolished the kingdoms in Northern Areas, and the serfs were legally freed from their feudal position. For their benefit they were given the small land holding to which they were attached, as their private property. This started the movement of these people from the historic district onto their open lands and fields. Only those stayed back who lacked the capital for construction of new houses on open fields. Thus further class stratification occurred within this group of people.

- **'Suburbanization' of lower agricultural land** which began in 1923 but became a flood in 1980's as the new middle class emerged, and built one-storey houses on their small farms.

- **Continued construction of road** throughout the larger area of the village in the 1990's, moving the form of Karimabad closer and closer to that of Gilgit. (Gilgit is the largest town in Gilgit Agency, and the last point which is accessible by air).

The three primary factors that caused the above mentioned changes in Karimabad can be identified as follows:

- Transition from **feudalism to capitalism**
- **Subjugation of the area** militarily, economically and culturally - first by Britain and later by Pakistan
- **Continued disregard for the ecosystem**, that although started hundreds of years ago, but has increased dramatically in the past two decades.

#### 4. IMPACT OF THE CHANGES ON PHYSICAL FORM, ENVIRONMENT AND SOCIAL STRUCTURE

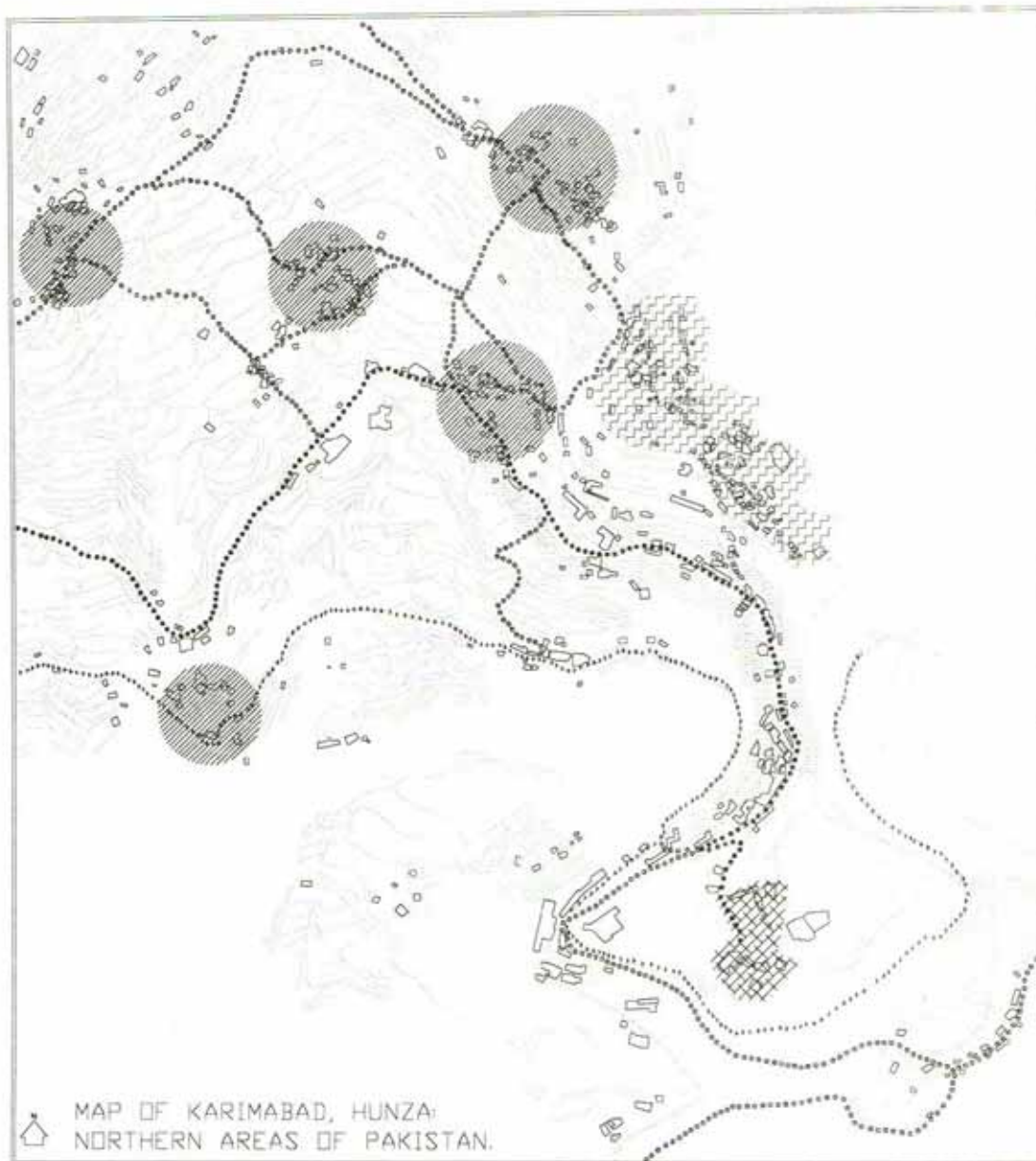
Under the pertaining development pressures, the traditional fabric of Karimabad is constantly being altered. Old houses are being demolished to make room for modern needs. Karimabad's current change from a secluded rural system to a semi-urban agglomeration involves problems of infrastructure, traffic, commercial activities and new construction modes. These have had their impact on the physical form and environment of Karimabad, as well as its social, economic and political structure.

**Physical Changes:** The scale and character of the built form of Karimabad has changed beyond recognition. The once contained, compact and clustered settlement has now become a sprawling stretch of suburban pattern, expanding up to and even beyond the nearby settlements. The built form of the traditional dwelling has also changed from a single roomed, closed and compact unit to a multi-roomed and open houses built solitary on fields and terraces. The materials and textures have also changed from that of earth and stone to cement and block.

**Environmental:** Environmentally speaking a visual depletion or degradation has taken place, which is continuously getting worse.

The once pure, clean and peaceful environment is now spoiled by rushing cars, jeeps, buses and trucks, which are a major cause of pollution through engine combustion, oil spills, car horns, headlights, etc.

The increased land value and speculation has resulted in clearing off of land along the new roads,



#### Development Phases of Karimabad

Pre 1891		Limits of earliest walled settlement (Fort, Khurukshal Khun, Dirimshal Khun)
		Outer limits of inhabitation (Pologround, Graveyard, Water Channels)
1923 - 45		Construction of new Palace
1923 - 80's		Extension of inhabitation as people move out to open land
1960		First road and automobiles
1960 - 74		Strip development along new road
1990's		Continued construction of link roads

**Figure #6:** Development Stages of Karimabad



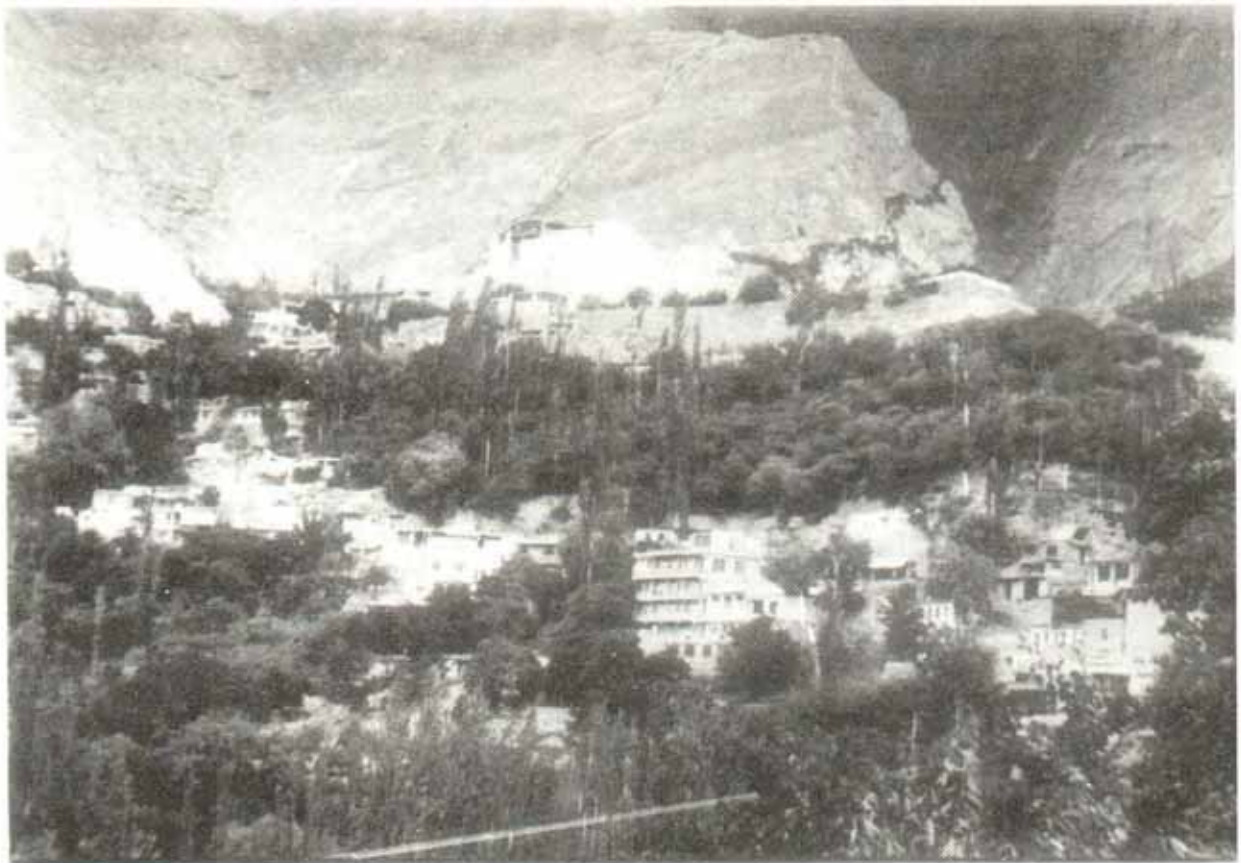
thus resulting in cutting of trees and clearing of valuable agricultural land. As a result the panoramic views of the green slopes of the valley are now marred with large out of scale structures (Figure #7, #8).

**Social:** The traditional hierarchical pattern in which everyone had his own social status according to the position he held, with the consent of the Mir (ruler) has changed. The people are now free to go out to other cities and work as they wish. Education is also available for those who wish to seek it. Thus each person is now responsible for

making their own social standing in the society.

With the changing trends in the upbringing of the younger generation, the patterns of family life are also under transformation. The system of a close-knit extended family is gradually breaking down.

The younger generation which has been to the cities for education, work, etc. no longer wants to live in the single spaced traditional houses, but want bigger houses with separate rooms, attached baths, kitchens, etc.



**Figure #7:** Panoramic views of the valley marred by multistoreyed concrete structures



**Figure #8:** The visually obstructive electric poles today marr the valley

## CONCLUSIONS

The town of Karimabad is an accumulation of settlements both old and new. Being the largest as well as amongst the oldest settlements of the region, it holds great historical and cultural significance. In addition to this, Karimabad's natural setting, its subsistence economy and fragile ecosystem, increase its values. But during the last two decades, the town has grown rapidly and increased its extents several-folds. Due to the pressures of modernization the town has become prone to developments, that are rapidly proving to be a hazard to natural environment and ecosystem of the area.

Judging by the pattern of developments taking place in Karimabad it can be said that they are

following the same pattern as Gilgit, Sust, and other similar cities which serve as strategic stop-over points for all transportation along the KKH. For Karimabad, however the residents may want it, this can never happen. The two major reasons for this are, firstly it does not lie directly on the Karakorum Highway and is located approximately 1000 ft. above it; and secondly its terrain is extremely sloping and hilly, without any flat spans of land (unlike Gilgit), which does not allow for continuous commercial activities and service areas (Gibbs, 1994). Thus Karimabad's economic viability does not lie in adopting models such as Gilgit, Sust, etc., but in strengthening its own potentials, and developing its economic base as a self-sustained community, using agriculture, tourism and other related sectors as the main income generating resources.



The most valuable assets of the region are its natural resources; its scenic beauty which display a sharp contrast of character, from emerald green belts of terraced fields, to starkly barren slopes of hard rock along with snow covered peaks in their midst. The existence and survival of human settlements in such a difficult terrain and climate, is an evidence of the undying courage and struggles of the people of this region, as well as the delicate balance of the ecosystem that allows for the continuity of life in the area. For centuries this balance between natural and man-made environment has been guarded by careful planning, sensitivity and wisdom of the past generations. The surviving parts of old settlements reflect on these principles which were to be considered while planning a new settlement or constructing a new house. Unfortunately, these principles are no longer reflected in the new developments, as a result of which there has been an accelerated deterioration, both in natural as well as the built environment.

The region has shown great potential as a tourist attraction, and this particular aspect has been and is still being exploited for economic gains. As a result the obvious destruction and deterioration of the environment becomes inevitable. The people, no doubt, show a clear desire for economic stability and improved living conditions. And for fulfilling this desire they have blindly disregarded the protection of resources that give the region its beauty and attraction. They have failed to realize that people do not come here to see high-rise buildings, or watch programs from dish, or see speeding vehicles pass by and pollute the serene and pristine environment that they have come to enjoy. Developing this realization is very important for making the people, willingly accept, any proposals or plans for conservation and protection of the natural and built environment.

Only imposing restrictions is not the solution. There is a need for developing guidelines and incentives that give people the right options to choose from. Options that in addition to fulfilling their dreams of a better and stable living, also protect their built and natural environment. Where life continues, changes are bound to happen. But they can definitely be geared for a better future.

Some guidelines that can be considered are as follows:

- All new developments should be planned as compact, small pockets, following the natural contours and proportions of the traditional settlement. They should have their share of peripheral green zones or belts, so that they are protected from winds as well as concealed from becoming visually unattractive patches in the panoramic views of the valley.
- Rules and regulations at regional as well as town scale must be developed, to ensure the protection and preservation of natural environment. The most important factor for consideration in this regard is the development of a land-use strategy, both for the historic district as well as the entire town, to control the haphazard and rapid growth of the town.
- For construction of new buildings also certain rules or by laws must be established so that they do not harm the environment. The most important factor being the mass, magnitude, and proportions of the structure. Such new buildings, no matter for what purpose, should not be constructed as huge masses of several storey height. They should not be more than two or three storeys high, and must be composed as an accumulation of small masses and blocks.

- For open areas and stretches of orchards and agricultural fields, the old rule of inheritance, may be given a legal status. According to this law agriculture land goes to one son, whereas all orchards go to another. In this way land is prevented from being divided into smaller and smaller patches of different ownership.

- Karimabad has traditionally been a pedestrian town. Even today the use of vehicles is limited to services and tourist activities. Forceful insertion of vehicular traffic into its fabric could prove to be an environmental hazard for the area. Thus there is more need for improving pedestrian network, rather than vehicular access to all the areas. Vehicular movement should be kept limited to the existing main roads, and strong pedestrian links, running perpendicular from these at frequent intervals, should be developed to provide easy access for pedestrians into the areas above and below the contours of the main roads. Attempts at connecting all residential areas with link roads, to provide vehicular access into them, should be minimized.

- Natural resources such as hydro-power and solar energy can be utilized as an effective source of energy, to overcome the growing demand for electric power.

- For the town of Karimabad the public facilities have reached a certain substantial standard in the past few years, specially in the field of education and transportation facilities to other towns and villages are also substantial, but for these some service stations and terminals need to be provided. Public facilities for the recreation of

the local people need to be taken care of in any master plan that is developed for the town of Karimabad.

- To sustain the community and its environment the traditional occupations and crafts should be revived and developed for achieving economic stability. At present, tourism seems to have the greatest potential for achieving economic uplift in the area. Thus revival of traditional occupations and crafts can only be achieved by gearing them towards tourism.

- Owing to the present trend of developments, the land value along roads has immensely increased. Results of this trend are seen in increasing strip development along main roads. It is essential to discourage any kind of developments that centralize commercial and tourist oriented activities. This can be achieved by first banning any construction immediately adjoining the roads, and by-laws should be made for keeping green belts on both sides of any vehicular road. Commercial and tourist activities must be planned in a more scattered way, taking their concentration away from the main road to other areas, thus giving a larger sphere of people the chance to benefit from tourism and commercialization.

For Karimabad the scars of development are still under controllable limits. Proper and well thought planning interventions can help in preventing the town from turning into a nightmare of development, as has happened to so many beautiful towns all over the world.





**Figure #9:** Commercial development along the main road in Karimabad

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