



## The Aga Khan Award for Architecture

## 1995 ARCHITECT'S RECORD

987.PAK

## I. IDENTIFICATION

Project Title Incremental Development Scheme (Khuda Ki Basti)Street Address Sector E-4 Gulshan-e-Shahbaz Taluka Kotri SindhCity Kotri Postal Code \_\_\_\_\_ Country Pakistan

## II. PERSONS RESPONSIBLE

## A. Architect/Planner

Name Tasneem Ahmed Siddiqui & Mohammad Azhar KhanMailing Address GRE - 319(2-B), Britto Road, Karachi 74800City Karachi Postal Code 74800 Country PakistanTelephone 729055 Facsimile 92-021-7219049 Telex \_\_\_\_\_

## B. Client

Name Hyderabad Development AuthorityMailing Address P O Box 176 Hyderabad Sindh PakistanCity Hyderabad Postal Code \_\_\_\_\_ Country PakistanTelephone 782541 Facsimile \_\_\_\_\_ Telex \_\_\_\_\_

## C. Project Affiliates

Please list those involved in the project and indicate their rôles and areas of responsibility (e.g. engineers, contractors, economists, master craftsmen, other architects, clients, etc.).

Name	Rôle
<u>1. Akhtar Ali Khan</u>	<u>Community Organizer</u>
<u>2. Saghir Khanzada</u>	<u>Office Assistant</u>
<u>3. Altaf Hussain</u>	<u>Sub Engineer</u>
_____	_____
_____	_____
_____	_____
_____	_____

**III. ARCHITECT'S BRIEF**

Please describe the initial project programme.

N . A

**IV. EVOLUTION OF DESIGN CONCEPTS**

Please describe the history of the project, from its conception to its final construction and actual use.

N . A

**V. CONSTRUCTION DETAILS****A. Description of Materials**

(please also indicate if locally produced or imported and whether fabricated on-site or elsewhere)

1. Foundations N/A

2. Principal Structural Members N/A

3. Infill N/A

4. Rendering of Façades or Exterior Finishes N/A

5. Floors N/A

6. Ceilings N/A

7. Roofing N/A

8. Other elements (please specify) N/A

**B. Construction Technology**

Indicate the basic construction technology, methods, details or systems.

N/A

C. Type of Labour Force (please indicate percentage) N/A Skilled Workers N/A Unskilled Workers

D. Origin of Labour Force N/A Domestic N/A Foreign

**VI. TIMETABLE**

(please specify year and month)

- A. Commission 2nd November 1986
- B. Design: Commencement 25th March 1986 Completion 1st November 1986
- C. Construction: Commencement 2nd November 1986 Completion February 1990
- D. Date of Project Occupancy 2nd November 1986

**VII. AREAS AND SURFACES**

Site and Building Area (please indicate in square metres)

1. Total Site Area 147 acres
2. Total Ground Floor Area 147 acres
3. Total Combined Floor Area 147 acres  
(including basement(s), ground floor(s) and all upper floors)

**VIII. ECONOMICS**

Please specify the amounts in local currency. Provide the equivalent in US dollars. Specify the date and the rate of exchange for US dollars at that time.

	Amount in Local Currency	Amount in US dollars	Exchange Rate	Date
A. Total Initial Budget				
B. Cost of Land	<u>Rs. 21780 per acre or Rs. 4.50/Sq. Yd.</u>			
C. Analysis of Actual Costs				
1. Infrastructure	<u>Rs. 111.00 per Sq. Yd.</u>			
2. Labour	<u>N/A</u>			
3. Materials	<u>N/A</u>			
4. Landscaping	<u>N/A</u>			
5. Professional Fees				
6. Other				
D. Total Actual Costs (without land)	<u>Rs. 110 per Sq. Yd.</u>			
E. Actual Cost per sq.m.	<u>same</u>			
F. Cost Comparison				

Please indicate how the costs of this project relate to typical building costs in the country:

                     Average                      Above Average 40% Below Average  
below conventional cost

**G. Sources of Funds**

1. Please indicate the percentage of funds that came from:

self help Private Sources                      Public Sources

2. If funding was public, what percentage was from:

N/A Local Sources N/A National Sources N/A International Sources

**IX. PROJECT SIGNIFICANCE AND IMPACT**

In what way is this project important ?

This project is attempted at development of a model approach to be adopted by the public sector for solving the shelter issues of the desperate shelterless at costs affordable by the target group and the implementing agency.

It is a self help sites and services scheme with only land and water through public stand post as the total basic shelter package. Remaining services are provided out of the funds arranged by the beneficiary through self help on community basis. Construction of houses is done by individual beneficiary from resources arranged by him.

Basic in the approach is targetting through an inbuilt system of screening the investors and speculators. For this purpose a two room houses had been built to serve as reception area. Reporting at the reception area with full belongings and entire family was

considered enough as an application to the plot and entitlement to possession of plot of 80 sq.yds.

The allottee is at liberty to live in the RA and build his house or he can make a temporary house on the allotted plot and improvise as he lives. The entry fees covers the cost of land and water PSP hence low cost.

No building bye laws are to be observed by the allottee. The only bye laws i.e. space around the house are inbuilt in the sub division of the scheme.

In the back drop of only two occupied plots in HDAs conventional schemes in a period of 6 years, the success of IDS was remarkable in the sense that the plots were occupied from the first day of possession. This project applied the concept of informal sector housing with components of minimum package of shelter and immediate possession of plot.

Please note: The submission of this Record is a prerequisite to candidacy for the Award. All information contained in and submitted with the Record will be kept strictly confidential until announcement of the Award is made. Subsequently, such material may be made available by the Aga Khan Award for Architecture and you hereby grant the Aga Khan Award for Architecture a non-exclusive licence for the duration of the legal term of copyright (and all rights in the nature of copyright) in the Material submitted to reproduce the Material or licence the reproduction of the same throughout the world.

Name (please print) TASNEEM AHMED SIDDIQUI

Signature 

Date 10 Dec. 1994

**13 DEC. 1994**

5/5



## The Aga Khan Award for Architecture

## ARCHITECT'S RECORD

CONFIDENTIAL

## I. IDENTIFICATION

Project Title The Incremental Development Scheme of Hyderabad

Street Address Sector E-4, E-3 & D-6 Gulshan-e-Shahbaz - Deh Sonwalhar

City Taluka Kotri (SIND) Country PAKISTAN

Telephone \_\_\_\_\_ Telex \_\_\_\_\_

## II. PERSONS RESPONSIBLE

A. Architect TASNEEM AHMED SIDDIQUI & MOHAMMAD AZHAR KHAN

Mailing Address P.O. Box No.176, Hyderabad Sind Pakistan

City Hyderabad Country PAKISTAN

Telephone 23541 & 26790 Telex 2263 BALHY PK

B. Client Hyderabad Development Authority

Mailing Address P.O. Box No.176, Hyderabad Sind Pakistan

City Hyderabad Country PAKISTAN

Telephone 23190 Telex 2263 BALHY PK

## C. Consultants (e.g. Economists, Sociologists, Demographers, Engineers)

Name Not applicable

Mailing Address -----

City ----- Country -----

Telephone ----- Telex -----

D. Contractor Not applicable

Mailing Address -----

City ----- Country -----

Telephone ----- Telex -----

E. Master Craftsman Not applicable

Mailing Address -----

City ----- Country -----

Telephone ----- Telex -----

**III. USE**

- A. Specify type(s) of Use: Housing Scheme for low-income groups
- B. User/Occupant
- Occupation/Profession Shelterless
  - Income Level (check one) ☐ High ☐ Medium ☐ Low ☐ Mixed
- C. Specify any change(s) between planned and actual use:

**IV. PROJECT TIMETABLE**

(Please specify year and month)

- A. Design: Commencement 25-3-1986 Completion 1-11-1986
- B. Construction: Commencement 2-11-1986 Completion March 1988
- C. Date of Project Occupancy Since 2-11-1986 till date  
(Settlement of shelterless families started from 2nd Nov. 1988 and is still continuing)

**V. PROJECT ECONOMICS**

(Please specify amount, currency and date of transaction)

- |   | Amount  | Currency | Date  |
|---|---|----------|-------|
| A. Total Initial Budget   | _____   | _____    | _____ |
| B. Total Actual Costs   | _____   | _____    | _____ |
| C. Actual Cost per sq. m.   | <u>Rs.120 per sq.yd. for provision of water supply, sewerage, roads and Electrification</u>                     |          |       |
| D. Analysis of Costs  |   |          |       |
| 1. Land   | <u>Rs.4.50 per sq.yd.</u>   | _____    | _____ |
| 2. Infrastructure   | <u>Rs.115.50 per sq.yd.</u>   | _____    | _____ |
| 3. Labour   | _____   | _____    | _____ |
| 4. Materials  | _____   | _____    | _____ |
| 5. Professional Fees  | _____   | _____    | _____ |
| E. Cost Comparison  |   |          |       |
| 1. Please indicate how the costs of this project relate to typical building costs in the country (check one): | <input type="checkbox"/> Average <input type="checkbox"/> Above Average <input type="checkbox"/> Below Average  |          |       |
| F. Sources of Funds   |   |          |       |
| 1. Please indicate the percentage of funds that came from:  | <input type="checkbox"/> Private Sources <input type="checkbox"/> Public Sources                                |          |       |
| 2. If funding was public, what percentage was from:   | <input type="checkbox"/> local <input type="checkbox"/> national <input type="checkbox"/> international sources |          |       |

**VI. CONSTRUCTION DETAILS****A. Site and Building Area** (please indicate in square metres)

1. Total Site Area: 150 acres
2. Total Ground Floor Area: 150 acres
3. Total Combined Floor Area (including basement(s), ground floor(s) and all upper floors): Not applicable

**B. Construction and Technology**

1. Describe the structural system and the basic method of construction: *Possession of 80 sq.yards plot is given to genuine shelterless with public stand posts for water supply and individual WC pan. Genuineness of the applicant is judged through the filtering process of reception area. Provision for remaining services is made on incremental basis through monthly/\**

2. Indicate which major building parts were fabricated on-site and which were fabricated elsewhere

*Not applicable*

*\* periodic payments made by the residents after ascertaining preference and desired level of services through community participation.*

**C. Description of Materials**

(please also indicate if locally produced or imported)

1. Foundations - - - - -
2. Principal structural members - - - - -
3. Infill - - - - -
4. Rendering of Facades or Exterior Finishes - - - - -
5. Floors - - - - -
6. Ceilings - - - - -
7. Roofing - - - - -
8. Other elements (please specify) - - - - -

**D. Type of labour force** (please indicate percentage)

- - - - - Skilled Workers - - - - - Unskilled Workers

**E. Origin of labour force**

- - - - - Domestic - - - - - Foreign



## VII. GENERAL GEOGRAPHY AND CLIMATE

A. Please describe the local geographic characteristics:

The project area lies between 68°-15' to 68°-30' East & 25°-15' to 25°-30' North & is located at a distance of about 150 KM North East of Karachi. Land is rocky with small alluvial soil.

B. Please describe the local climatic characteristics: The climate is hot & arid. It is characterized by dry season most of the year with little rains in the months of July/August.

The thirty year mean maximum temperature varies from 24.2°C in January to 42.3°C in May. Mean minimum temperature varies from 10.1°C in January to 27.9°C in June. Average rainfall is 112 mm.

It is windy throughout the year with peak period between May & September ranging between 14 to 17 km per hour. Minimum wind speed experienced by the region is 4 to 9 km per hour between November to April.

## VIII. EVOLUTION OF DESIGN CONCEPTS

Please describe the history of the project, from its conception to its final construction and actual use.

Rapid urban transformation in the Third World countries during the last 30 years has been an unprecedented phenomenon. In most countries consequent developments of this transformation (unemployment, crime, "pathological growth" of slums, pollution and lack of basic civic services) have been far more dramatic, and spectacular than the population explosion itself.

Basic reasons for this mass migration - exodus of epic, historic proportions are the misconceived development strategies adopted by the L D Cs, both in the rural and urban sectors. The land cannot provide the rural poor with a job, so migration in most cases is like a plea for employment, a courageous expression of the willingness to work more than the poor soil or the unjust society of their home area will allow them to.

When these poor, jobless migrants land up in cities they find neither jobs nor affordable housing and having no other alternative, tend to become part of the sprawling, ever-expanding squatters' slums. In some of the countries half-hearted attempts have no doubt been made to solve the problem by launching low-cost housing programmes for the urban poor but these policies miserably failed mainly because the government response to meet the shelter needs of the urban poor is not compatible with their sociology and economics.

Surprisingly, the 'informal' sector has succeeded where most governments with all their resources and wisdom (?) have failed. Today, in almost all the LDCs the shelter needs of the urban poor are being met by the professional land-grabbers, sub-dividers, brokers, the middlemen, call them by whatever name.

After having analysed: (a) the reasons for government failure, and (b) the success of the 'informal' sector, Hyderabad Development Authority has come out with an innovative solution to provide housing to the urban poor at prices and standard of development within their affordability & acceptability. While doing so it has focused its attention on important issues which do not receive appropriate attention in traditional schemes: targeting & affordability, the procedure of allotment and the timelag between allotment and possession of plot.

With emphasis on these basic issues, a project was started, called 'Incremental Development Scheme'. In this scheme, through a process of trial and error, stepwise, a new approach has been developed which has become capable of overcoming the common weaknesses to quite an amazing degree.

contd on page 2.....

Basic in the new approach is that the option offered is affordable to the target group. Therefore, a very low down payment (Rs.1000.00) is required. Development of the scheme is incremental. Initial services are limited to the absolute minimum: at the start, the package consists of 80 sq.yds. plot of land with a water closet pan along with community tap for water supply. Only in the longer run, house-to-house water supply, sewerage, road paving, electricity and gas will be provided as the allottees pay their monthly instalments ranging between Rs.50.00 to Rs.100.00. Also, standard prescribed pertain only to items that cannot be changed later. Thus, only the lay-out of the scheme is fixed otherwise absolutely no standards are prescribed as to the quality or plan of the house. The allottees are rather encouraged to innovate and improvise. They can start with a 'jhuggi' if they like. Critical factor is the guaranteed and assured title to the land. Once people have that it is amazing how resources are pooled by the family to invest and gradually make a respectable & acceptable structure. Secondly, just as is the case of illegal development, the timelag between allotment and occupation has been eliminated. Development takes place while the allottees are residing in the scheme.

In order to achieve all this, the allotment procedure is crucial. It is especially in this respect that new ways have been developed to reach the target group and to exclude those who do not intend to live in the scheme after acquiring their plot.

A reception area comprising of 2 rooms has been provided at site where the shelterless family is settled and is registered for allotment of plot, only if it brings all its members and entire belongings with it. A regular plot is allocated if they stay in the reception area for about a week.

Other important features of the scheme are: a) it is entirely self-financing - there is no element of subsidy, formal or non-formal - entire cost of the 80 sqyds plot (which is Rs.9600.00) would be recovered but in easy instalments spread over a period of eight years. The amount of Rs.9600.00 includes cost of land @Rs.9.00 per sqyd, external development charges amounting to Rs.2400.00 @Rs.30.00 per sqyd, includes construction of major roads, construction of Filter Plant, main water supply lines, oxidation pounds and trunk sewers while the remaining amount of Rs.6480/- is to be utilized for internal development of the scheme which includes door to door water supply, internal sewerage lines, internal roads, electrification etc., b) provision of services has been linked with cost recovery, c) in order to reduce the cost of construction development of low-cost appropriate technology based on locally available cheap material has been encouraged keeping in view the climatic conditions and socio-economics status of the allottees, d) no paper work is involved - allotment procedures are transparent and very simple- the formalities regarding registration etc. are completed by HDA staff itself, and e) community is involved from planning to execution of development work, maintenance, improvement and cost recovery.

The only document issued to the allottee initially is a registration card having the record of payments made towards the plot as it had been found that any form of title document tended to retard habitation.

This scheme which was launched in November 1986, is at the nascent stage right now, but after overcoming the initial difficulties, over 2181 allottees have already occupied their plots and are building their houses as they live there. At least 700 additional jobs have been created by the fast-growing construction activity which testifies to the fact that investment in housing has tremendous impact on income and employment through multiplier linkages.

## IX. PROJECT SIGNIFICANCE

### 1. In what way is this project important?

Please describe the aspects of the project which represent a particular achievement (for example the technical, economic, or social achievement, or its response to culture, climate, etc.)

*This project is important because it is the pioneering attempt from the formal sector to make land accessible to the urban poor at prices and standard of development affordable by them. While doing so the sociology & economics of the target group has been kept in view.*

*In the past most of the formal sector attempts have failed miserably in their objective because of their stereotype supply system which is oriented towards facilitating the working of the supplier agency rather than being oriented towards the beneficiaries. On the other hand the informal sector or the land-grabbers/illegal subdividers have oriented their efforts towards the convenience and requirements of the beneficiaries. The comparative success (or failure) of the formal & informal sectors can be gauged by the ratio of habitation in their respective schemes.*

*A survey for the province of Sind has revealed that in the schemes announced since 1970 in the formal sector, out of 1,19,916 small size plots (i.e. below 120 sq.yds) only 2,924 stand occupied.*

*As against the above, in the informal sector schemes (katchi abadis) total 17,386 acres have been occupied by 4,00,500 families within the same period & having only partial infrastructure.*

*Analysis of the above situation revealed that the basic criteria to be taken into consideration for a successful shelter supply scheme should be based on the following components:-*

- Targetting
- Identifying the genuine shelterless
- Affordability
- down payment, subsequent development charges linked to provision of initial basic services incrementally with community participation
- Procedures for allotment
- Timelag between communication of desire of the applicant for plot & its supply to be minimum

*In the Incremental Development Scheme the family desirous of obtaining a plot is made to pass through the 'Reception Area' which consists of 2 rooms as well as an open plot where the desirous family bring all its belongings and family members, stays there for a couple of days and then allotted a regular plot of 80 sqyds where the family is expected and required to live and build a shelter to its requirement. In case of absence from the plot, the allotment is cancelled & plot allotted to any other applicant again from the reception area.*

*contd on page 2.....*

### 2. Please indicate the degree to which the client and users are satisfied with the project.

*The percentage of habitation in the scheme is the indicator of the degree of satisfaction of the users.*

The process of reception area while discouraging the speculators also eliminates the discretion of the plot supplying Agency (HDA) at the same time creating an initial sense of community participation to be made use of at subsequent stages of common identification of development works and cost recovery for laying of infrastructure.

After initial surveys regarding household income and expenditure level the down payment or entry fees for eligibility of possession of plot has been fixed at Rs.1000.00 per plot to cover cost of land, cost of public stand post for water supply and a WC pan to form basis of a healthy living environment.

Remaining payment for other services is to be provided out of monthly collection of Rs.50.00 per month per plot. The laying of services is incremental linked with cost recovery and only those services are provided for which the beneficiaries deposit the cost in advance. This incremental development reduces the financial burden on the beneficiaries. The development component is identified by the beneficiaries alongwith item rates of development & the contractor.

The preferences and requirements of the community have also been catered in the planning of the layout of the scheme. The plot size of 24'x30' and provision of back lane are the results of the community's demand.

Procedure for allotment has been kept very simple and transparent. The applicants have been given a firm understanding that all those who bring their family and belongings in the 'reception area' would get a plot.

The registration card (the only document in the whole process) is prepared by HDA to record payments for development charges.

There is no timelag between the contact of HDA with the applicant and provision of a shelter form (reception area) subject to the condition that rooms are available there. The applicant can install a make-shift house in an open land earmarked as reception area if he/she so likes.

The success of the scheme, i.e. supply of plots though reception area was initiated on 2nd November 1986 and as of May 1988 out of 2813 allotted plots, 2181 families are living there while remaining show their interest by casual individual attendances.

Emphasis in the scheme is not on the numerical strength of the habitation but on the process which ensures availability of a plot to any desirous applicant with minimum bureaucratic hurdles.

This experiment has shown that even without bringing about basic changes in the power structure of the society; without changing the unequal relationship between government and the slum dwellers and even without any definite political programme in favour of the "wretched of the earth", development authorities can successfully assume the role of the 'informal' sector as its strategy is perhaps the only answer to provide shelter to the urban poor at affordable prices.

**X. PRESENTATION REQUIREMENTS**

1. The materials described below are the minimum requirements for project presentation. Please note that standard presentation dossiers are prepared by the Award, and materials should not be mounted or bound. All materials should be clearly identified. The following should be submitted:
  - A. Map indicating location of project in city, community, neighbourhood, or landscape.
  - B. Ten (10) photographs; preferred and maximum size for A4 presentation (18 × 24 centimetres).
  - C. Twenty (20) slides; 24 × 36 millimetres.
  - D. Drawings; preferred and maximum size for A3 format presentation (29.7 × 42 centimetres).  
 Site, Roof, and Massing Plans;  
 Floor Plan(s);  
 Elevations;  
 Sections.
  - E. Curriculum Vitae, or Firm's Prospectus.
2. The submission of additional materials is encouraged. Please specify any appended materials not listed above.
3. Please indicate other sources of information on the project, e.g. publications, contacts, etc.

Please note: The submission of this Record is a prerequisite to candidacy for the Award. All information contained in and submitted with the Record will be kept strictly confidential until announcement of the Award is made. Subsequently, such information may be made available by the Aga Khan Award for Architecture for scholarly purposes only. Nevertheless, other persons wishing to publish, reproduce, or reprint such information shall be required to secure prior permission from the author in each instance.

Signature \_\_\_\_\_

Name (please print) Tasneem Ahmed Siddiqui & Mohammad Azhar Khan Date 2-8-1988

All Materials should be forwarded to:

**The Aga Khan Award for Architecture**  
 Award Procedures  
 32, chemin des Crêts-de-Pregny  
 1218 GRAND-SACONNEX  
 Switzerland

Telephone: (22) 98 90 70

Telex: 28842 AKAA CH

Cable: AKAWARDS

### III. VISUAL MATERIALS

Please use this space for a visual representation of the project, i.e. sketch, photo, photocopy, etc.  
Additional visual materials appended to this form will be appreciated.

### IV. SOURCES OF INFORMATION

Please indicate possible sources of information (bibliographical or other).

### V. NOMINATOR'S STATEMENT

Please indicate why you feel this project is important.

Name (please print) \_\_\_\_\_ Date \_\_\_\_\_ Signature \_\_\_\_\_